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BackTrack

RECORDING BRITAIN'S RAILWAY HISTORY

Vol.3 No.3 July-August 1989

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ABOUT OURSELVES

I might have known that inviting BACKTRACK readers to give us their views would open the flood gates; but I was astonished at the response generated by my appeal for ideas. Thank you all for your letters. I could not possibly reply to every single one in person but if your response is typical of the goodwill you all seem to feel about this journal, then my role will indeed be pleasurable.

However, one or two general points relating to our policy and stategy kept recurring in many of your letters and I am happy to amplify the matter here.

Happily, no-one objected to the idea of six issues per year but this feeling was qualified by a very clear indication that this should not be at the expense of quality. Nor will it be as far as I am concerned. There will be no 'padding' in BACKTRACK – indeed, it is already beginning to be difficult to get everything into the 48 page format and still maintain the full 'contents menu' and design standards established by my predecessor. We are therefore now looking seriously at increasing the page content of the magazine (including four more colour) once the new two-monthly publication cycle has become established. There will be cost implications, of course, for quality always costs money, but we will not spring price rises without warning or explanation.

In the meantime, this issue tries to meet some of your ideas by introducing a few new concepts (eg the 'Irish' element on the cover and elsewhere, plus the 'social' article on p. 138). Like that well known bank, we are listening!

QUO VADIS, NRM?

BACKTRACK is non-political and we do not normally venture into museum areas; but the NRM is an exception, since the recording and presenting of railway history is difficult if not impossible without active participation by the custodians of its prime sources. We must therefore express a degree of alarm at the implications of a recently proclaimed "Under New Management" philosophy just received in the BACKTRACK offices via the newsletter of the Friends of the Museum.

It would seem that the "Great Railway Show" is now to be the order of the day and nowhere is there made much mention of historical railway knowledge and scholarship playing any really central role in the forward strategy of our only national institution charged with these matters. Fashionable commercial and market-orientated nostra seem to have taken over and the voice of education is now, apparently, merely to "have a say in matters". The irony of course is that when established in 1975 under DES, the NRM was conceived as a free *educational* institution with its displays and philosophy wholly in the control of recognised railway historians. Who will now call the tune?

Mercifully, the vital reference library seems to have emerged unscathed – for how long, we wonder? – and for our part, we shall go on giving a platform in BACKTRACK for such historical scholarship as may still manange to emerge from the Museum. We also hope our greater fears are unfounded; but we shall watch very carefully to see whether the new order is really presenting railway history to the public or is now merely playing with the trains in pursuit of mammon!

RAILWAY VIDEO

It cannot have escaped readers' notice that there is a minor explosion in railway video cassettes appearing on the general market these days and we have often been asked whether we intend to join in the party. Frankly, our present view of most of the offerings currently available is not usually one of wild excitement. There is far too much 'stitched together' archive film without any real story line or historical interpretation, and many offerings suffer from indifferent camera work (from domestic camcorders?), 'wooden' commentaries and amateurish production technique. There is also far too much preservation in many of them to be able to make a valid historical statement. But we have wondered whether a genuinely historical railway video series, professionally produced and attempting to explain things along the style of BACKTRACK, was worth investigating. If you think so, let us know; we might then try to do something.

David Jenkinson

NEXT ISSUE ON SALE 31st Aug 1989

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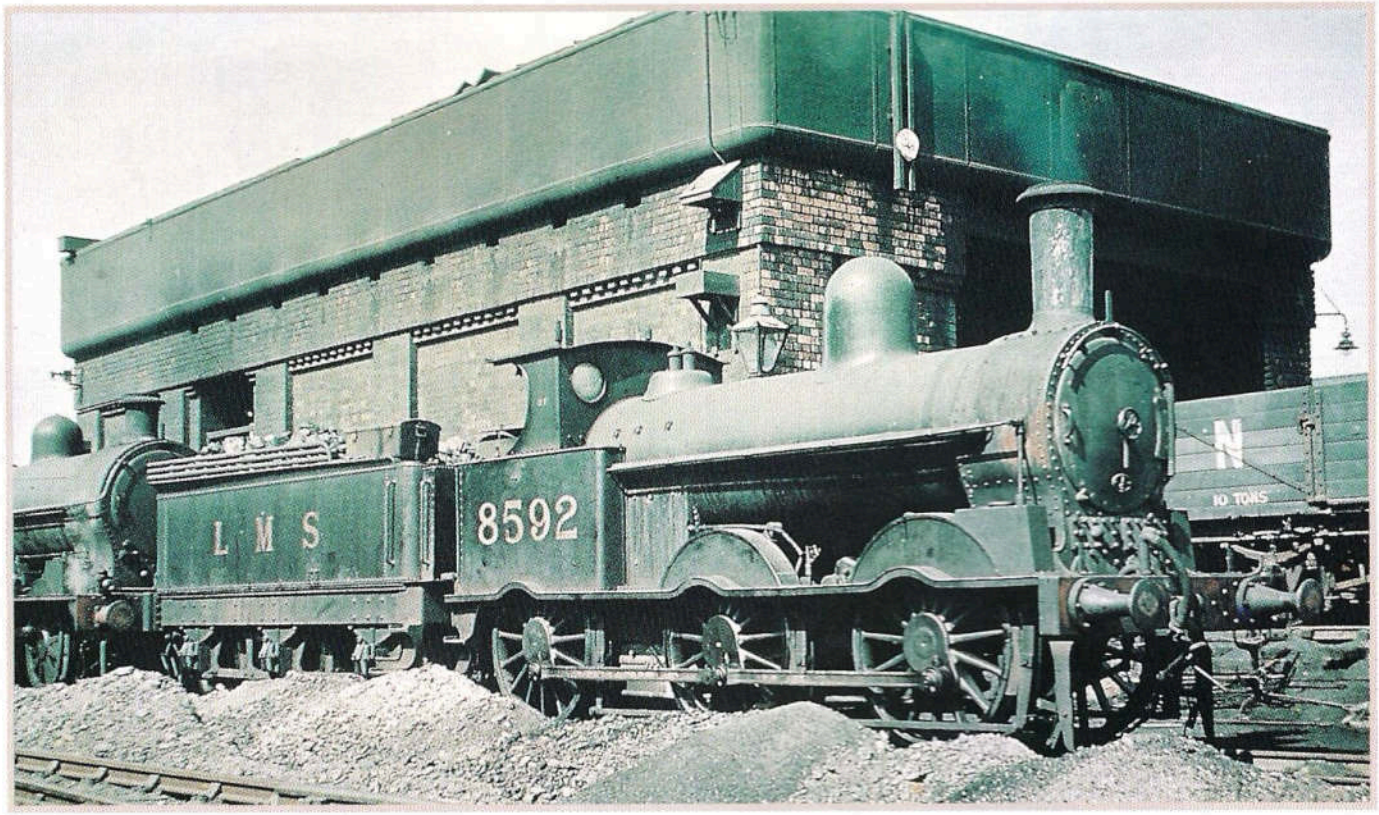
BLETCHLEY

BELOW: This rare colour study of a Webb LNWR 'Cauliflower' at Bletchley coal stage in 1938 is additionally interesting in showing an example in near-original condition (ie still with round-top boiler) and wearing the attractive red shaded insignia introduced by the LMS in 1937. Photo: L. Hanson/Colour-Rail

ABOVE: One of the last working LMS Class 2P 4-4-0s, 40646, takes water at Bletchley on 14th April 1962. It was returning to Birmingham from Luton via the Dunstable Branch and Leighton Buzzard with a special train organised by the SLS which during the day toured no fewer than seven branch lines. Photo: P. Riley



Visiting former train spotting haunts can be a disarming experience which has probably afflicted most readers. The mixed feelings of curiosity and stunned incomprehension, with not a little melancholy, to discover that much remains in memory only.

Few stations have withstood the rigours of the 1950s and 1960s. In 1948 when British Railways were formed there were 7,000 stations, by 1982 this total had shrunk to 2,365; clearly quite a few had ceased altogether!

With that kind of retraction, the railways were bound to undergo some pretty drastic changes in appearance. One of the most regrettable, to me, has been their depopulation. Outside the commuter rushes many station platforms are quite spacious places compared to the teeming populace of thirty years ago. A large proportion of the heirs to their travelling days are now hurtling up and down the nation's motorways.

Thankfully the railways exist to serve those that choose for one reason or another to avoid this frenzied pursuit and use their travel for business discussion, study, rest and contemplation or conversations with other travellers sharing a mutual direction.

A feature of the station was the Bletchley post office adjoining Number 1 platform shown here in the early 1950s with a good array of GPO vehicles in service. Note the popular 'Temperance Refreshment Room' on the right provided by the LNWR: a strong endorsement to railway personnel to refresh themselves only with non alcoholic beverages. It was affectionately regarded by railwaymen as the 'Coffee Nob' and was self-funding. It also included reading and billiard rooms. Photo: BRLMR

RECALLED

by **BILL SMITH**

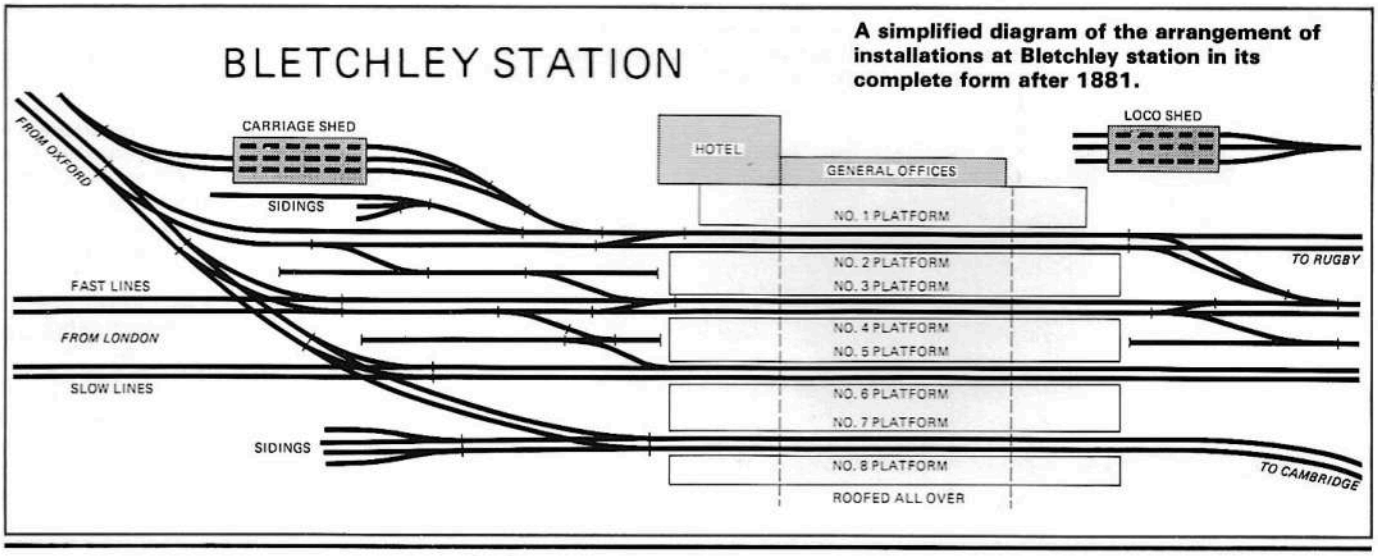
Equally lamentable is the drastic reduction of railway staff that used to be employed at all of these stations and beyond in steam sheds and goods yards. This conveyed so much the impression of a busy working railway with many differing roles of public service. In the peak year of 1919 there were 750,000 people so employed, there were still 635,000 in 1948, by 1982 this had become a mere 184,000; their absence is strikingly visible.

Bletchley is a good example of the rise and decline of a major rail centre. Although by no means reduced to a wayside halt, it has to be admitted that it is not often necessary for main line trains to stop there. Moreover, the opening of Milton Keynes station in May 1982 has unquestionably stolen some of its thunder.

Origins and Growth

The station is first mentioned on November 2nd, 1838 when the London & Birmingham Railway Ways & Works Committee tacitly instructed Mr Robert Stephenson to place a wooden office at the crossroads between Bletchley and Fenny Stratford, for a stopping place. Eight months later on June 22nd 1839 the second class station first appeared as a regular timetable stop. Twelve months later it was issued with the name 'Bletchley & Fenny Stratford' which lasted until the latter village received its own station with the opening of the Bedford branch.

With the opening of this branch on November 17th 1846, Bletchley achieved greater importance by being the junction station of a line to a large county town: a line that had every intention of extending itself to reach the by no means unimportant city of Cambridge. Further, the extension of a



A simplified diagram of the arrangement of installations at Bletchley station in its complete form after 1881.

The stone arcaded front to Bletchley station in 1952: solid Victoriana from the rebuilding of 1881. Photo: BRLMR

line westwards to Banbury (1850) and Oxford (1851) ensured that the junction would be required to ascend to a greater prospect than being a stopping place at a crossroads. In the mid-1840s matters were taken in hand to that effect and by 1848 the layout of the station was as follows. A No.1 platform stood at the end of a short service road with a modest number of station buildings; then the two tracks for Oxford and Banbury trains enclosed the first island platform 2 and 3. From 3 four tracks were spread for the main line services, the two centre tracks for up and down through trains and the outer for stopping trains. Another island platform held faces 4 and 5 with two more tracks for the Bedford and potential Cambridge trains. There was also a small locomotive shed that could hold four engines; this was added in 1850. It was built of wood and galvanised iron and was summarily demolished by a gale in 1876, its fragments being wrung onto the locomotives it enclosed.

As a result of some disaffection between the Great Western Railway and the sibling Oxford Worcester & Wolverhampton Railway, the latter sought the acquiescence of the LNWR to reach the capital at Euston rather than Paddington. The LNWR agreed and a connection was made at Yarnton near Oxford whilst at Bletchley a connection between the main line and the Oxford line south of the station was made in October 1854. The relationship blossomed to the point of inviting the LNWR to run as far as Worcester in 1855, instead of only to Hanborough. Compliantly OWW trains were allowed to run into the LNWR terminus at Oxford: all of this probably intended to pique the GWR that had promoted the Worcester company in the first place. However, by dint of amalgamations the 'thankless child' was eventually returned to the parent in 1863 and the 'Worcester curve', as it was called at Bletchley, was severed but maintained as a brickworks siding.

The subject of the triangular junction at Bletchley is further enhanced by its appearance: the sunken lake complete with swans and rushes being enclosed within passing trains. This was in fact an ingenious reservoir for Bletchley station, the water being pumped to the top of the embankment by a steam pump house. For the station had not only to supply its increasing fleet of thirsty locomotives and its own ancillary needs but Castlethorpe troughs as well, all of which was drawn from 'the new foundout' (I have never had this name explained to me). What is certain is that it was an elegant synthesis of the essential and the visually delightful.

In 1859 a third line was opened between Bletchley, Watford and Primrose Hill alongside the main line and gauntleted at the Primrose Hill tunnels. This was intended to accommodate the increasing demands of goods traffic. The L&B main line, which became part of the greater undertaking of the LNWR in 1846, came under increasing pressure with the opening of the route to Leicester (1840), the Northampton branch (1845), the Warwick branch (1845) and the Rugby to Stafford Trent Valley line in 1847. In real terms this meant that the goods relief line, which did see passenger trains also, could be little more than a temporary expedient; much greater changes were undertaken by the powers for quadrupling and New Works Act of 1872. They included expansive acquisition of land to the east of Bletchley station that would not only see complete rebuilding but the erection of a large goods shed and extended goods yard adjoining. Included also was the purchase of land alongside the main line to the north of the station in the angle of the Bedford branch where a large marshalling yard was planned.

With the kind of efficiency that would dazzle road builders in the present century, the LNWR quadrupled their tracks to Rugby by 1874. In the wake of this were the developments at Bletchley which when completed established it as the most important junction station between Willesden and Rugby.

In 1867 the Board of Trade had insisted that all new installations were to have interlocking points and signals, removing the arduous and debilitative system of isolated switchmen. In effect this took place at Bletchley in the same year.

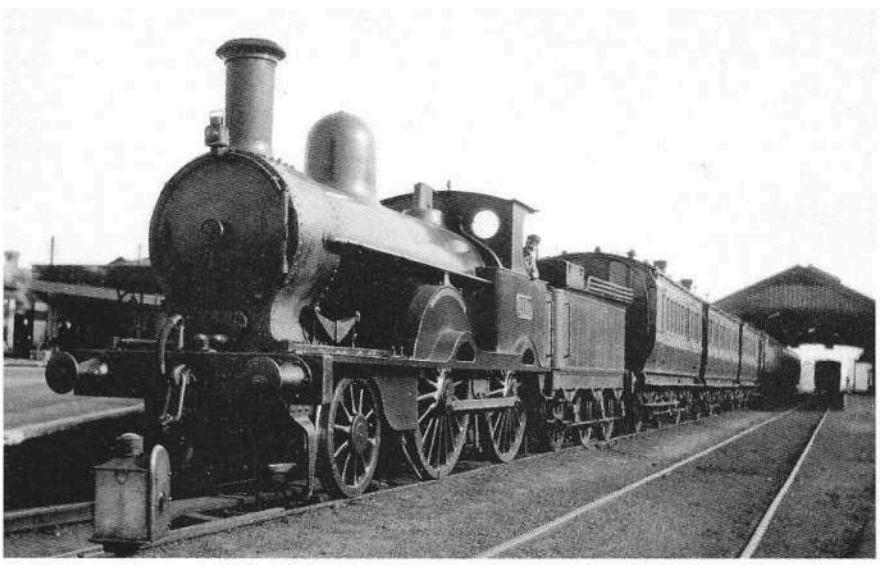
The level crossing from the earliest days was an obvious anachronism and one that was roundly complained of by people having to wait for a pause in the intensifying main line traffic. In the late 1850s the road had been burrowed beneath the railway but it was the quadrupling that brought this into being as a more substantial structure.

Looking across the 'up' and 'down' fast lines in the late 1950s (after the removal of the LNWR style all-over roof) which created an open airy prospect at the station before the jumble of electrification wires arrived. Regrettable is the loss of the Flemish gables and diapered brickwork of the hotel buildings that were demolished during modernisation. Photo: Lens of Sutton

Shortly before the demise of the first locomotive shed another shed was added as a supplement about 1866 which obviously reflected the demands of the station's increasing role as augmentor of the local services and the build-up of their traffic. However, with the new works programme rapidly under way, the site was cleared in 1877 and a splendid six-road shed of Webb design with twin hipped roofs was erected. This presented a much more business-like approach to the new station. It was 250ft long and 100ft wide and could hold no fewer than 24 tender engines. As events proved, demand would outstrip even this capacity.

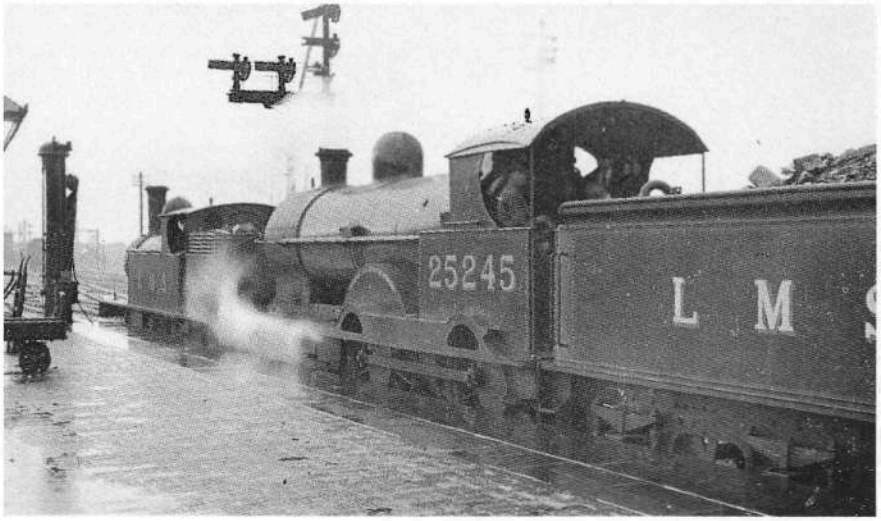
The earliest known water tank house would be hopelessly inadequate for this new demand of engines and it was turned over to the use of an enginemen's lodge; it had been the offices for the locomotive running department. The new structure supported a tank of 60,000 gallons whilst the base of it was the engine coaling plant. Amongst other new installations was a hydraulic wheel-drop and a 42ft turntable which was itself replaced by a 50ft table in 1917, the former being moved to Banbury.

The first locomotive stabling arrangments had been primitive by comparison, with some of its sidings running right up to the station



ABOVE: An Oxford train of six-wheelers entering Number 2 platform behind LNWR 2-4-0 1168 *Cuckoo.* Photo: L&GRP Courtesy David & Charles

BELOW: North end of the station in LMS days with 5ft 6in 2-4-2T piloting 'Precursor' 4-4-0 25245 *Antaeus* **a down passenger train.** Photo: T.J. Hansen



pedestrian approach road. The water tank house was in fact facing the station entrance. In the latter part of the 19th century, sheds became more enclosed, almost fortress-like establishments, which probably had as much to do with public safety and the company avoiding the liability of accidents than keeping the railway enthusiast at bay!

In the new works, the station itself was given another island platform which renumbered the faces up to 8. The result, completed in 1881, was the Bletchley familiar up to the time of electrification and seen in some of the accompanying photographs. This included eight signal boxes and a marshalling yard of eleven roads receiving and dispersing goods trains to six substantial towns, not forgetting the numerous smaller town and village stations and remembering also the country sidings scattered between them.

Motive Power

The allocation of motive power and passenger rolling stock was to some degree dispersed with Bletchley as the main depot. There were large sheds at Oxford and Banbury and slightly smaller ones at Cambridge and Bedford with the smallest examples of one-road sheds at Newport Pagnell, Leighton Buzzard and the early London & Birmingham station of Aylesbury. Although locomotives operated these routes from their own sub-shed, the engines were changed weekly with the main depot. At Aylesbury the diminutive workhorse for the branch was a Webb 5ft 6in 2-4-2 tank which had its fire held at a low ebb in the shed overnight, not to be 'dropped' until returning to Bletchley on Sunday night.

The store of motive power for the LNWR period is typically illustrated in the 1919 situation where, of the total number of 46 engines carrying the Bletchley shed code (No.3), 14 were held at sub-depots.

Similarly stock for working the lines was dispersed in 'sets' or units with the greater supply for working the 'Oxbridge' route and London Surburban services in Bletchley carriage shed.

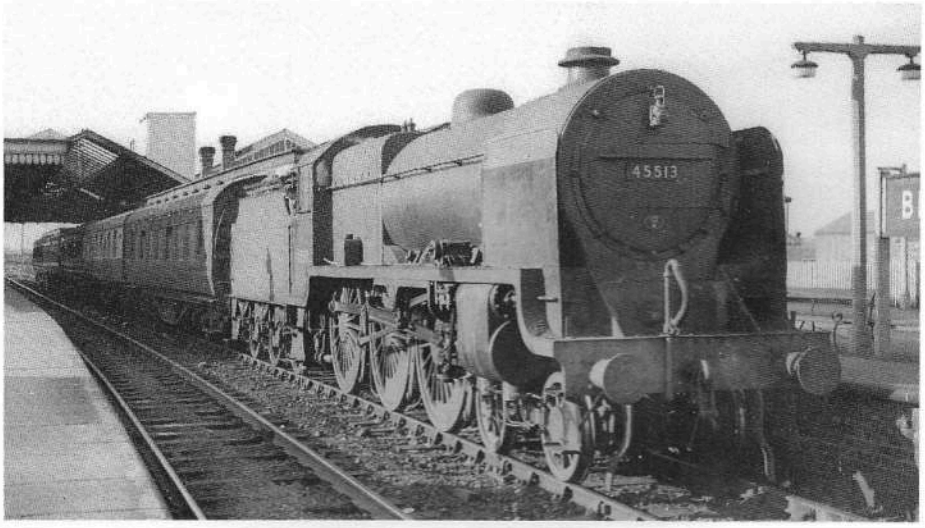
Engines running on main line metals tended to be 'George the Fifth' and 'Precursor' 4-4-0s and to a lesser degree the 'Jumbo' group of 2-4-0s which were by 1919 tending to work 'Oxbridge' and Banbury trains, although they often supplemented heavy southbound trains for the long pull over Tring summit. The cross-country route also had a lot of its mixed traffic workings hauled by 0-6-0 18in Goods, Ramsbottom 'DXs' and Webb 'Coal Engines'. The branches, Aylesbury, Newport Pagnell and Dunstable being the haunts of the smaller tanks including the Webb 0-6-2 'Coal' tank.

The LNWR also founded an entire dynasty of eight coupled locomotives, the pariahs to the enginemen being the 'Compound' versions that were, after the Webb period, mercifully simplified. They were sorely needed at Bletchley to work the heavy brick trains from off the 'Oxbridge' route and down to the burgeoning demands of London suburbs. When one bears in mind that a normal loading for these could be 800 tons, the traction of those eight wheels would be fully employed together with a banking 0-6-0 to slog the fifteen mile climb to Tring summit.

The shed was also equipped with a ten-ton breakdown crane.

With the eclipse of the LNWR and the greater amalgamation that produced the London Midland & Scottish Railway in 1923, the LNWR types still prevailed at Bletchley. An exception was the ex-Midland Class 4F

Unnamed 'Patriot' 45513 on the 'up' slow with a local train to Euston in the 1950s. Photo: Photomatic

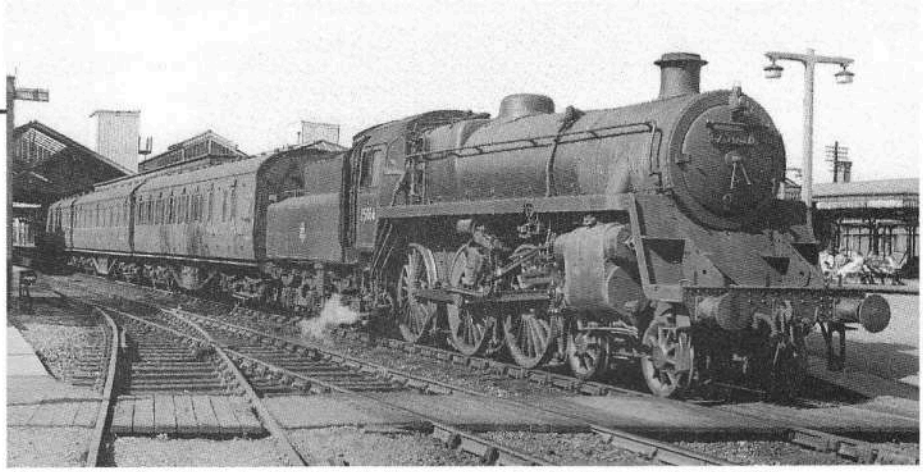


0-6-0 that supplemented the decline of the ex-LNWR six-coupled types on the branches. Later the Stanier 2-8-0s relieved the ageing eight-coupled workings of the former company.

Photographically at least, the last local evidence of an 18in Goods or 'Cauliflower', was on the Banbury branch in 1942 when a very tired looking representative of the class rumbled through Padbury. The last of the class 58427 was seen languishing at Trafford Park, Manchester in August, 1956.

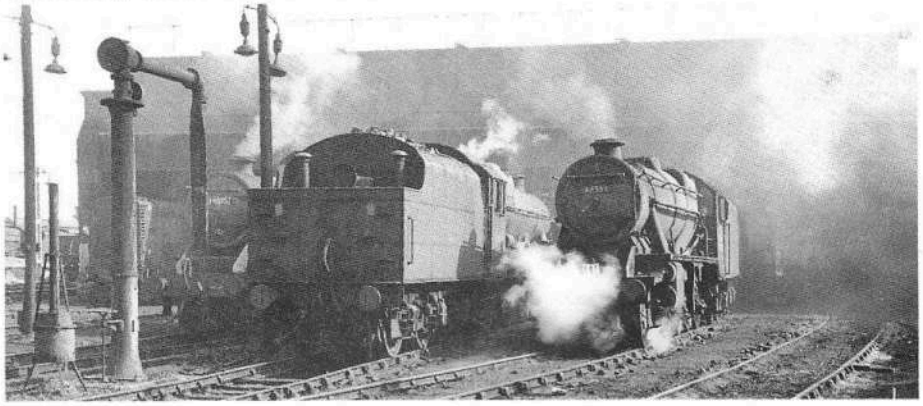
Serious problems in the cotton industry in Lancashire in the 1930s must have resulted in an excess of motive power as six Aspinall 0-6-0s (LMS Class 3F) were allocated to Bletchley shed in that decade. The gentler slopes of Buckinghamshire and adjoining counties would give them an easier time than the uncompromising opposition of Pennine gradients, although Bletchley enginemen, who called them 'Gracie Fields' at polite moments, did not find the experience a melodious one!

A more welcome immigrant from the north was the Aspinall version of the 0-6-0 saddle tank; that was much praised for being ideally suited to its job of shunting marshalling yards. The driver could wedge a wooden board between the bunker and under the reversing lever and sit sideways on it, looking over his left and right shoulders correspondingly as he rolled happily backwards and forwards for hours on end with all his controls at his elbow.



ABOVE: During the late 1950s Bletchley shed took delivery of three BR Standard Class 4 4-6-0s (75036-8) which were seen regularly working the Oxford trains. The first of them is thus employed on this photograph at Number 2 platform. Photo: Photomatic

BELOW: Mines of Sulphur! Bletchley shed in the 1960s after the hipped roof had been replaced with a glazed ridge and furrow design behind the concrete facade, in 1954. A Class 5 4-6-0 and 8F 2-8-0 flank a 3-cylinder 'Jubilee'. At this time the 2-8-0s were handling the heavy brick trains off the 'Oxbridge' branches along with chalk trains from Leighton Buzzard. The steam shed closed on 5th July 1965. Photo: Norman Sissons



Twentieth Century Changes

As one of the centres of the LNWR's regional control system, a control office came to Bletchley in 1913 and was installed in the station buildings on No.8 platform. This was to control a section from immediately north of Tring to immediately south of Roade, 28 miles of main line. Included also were 142 miles of branch lines.

The high point of Bletchley's existence must have been in 1941 when all its facilities were in full use including all its stations. Traffic from the shed was handled by 67 engines and 600 personnel were employed to administer it. Many of the trains along the 'Oxbridge' route carried some of the war's most important commuters to and from Bletchley Park, the former home of Sir Herbert Leon that had become part of Military Intelligence including one department innocuously called 'Hut 3' that held the crytographers that had created the war's greatest secret. Their cracking of the German radio communicating cypher called 'Enigma' with a device code named 'Ultra' (with which the Allies listened to enemy communication throughout most of the war), was a monumental achievement. Another indication of the intensity of wartime was on August 31st, 1942 when the old OWW curve, that had for some years served as a siding to a local brick company, was re-connected to the Oxford line and began its essential role as part of the cross-country freight link-up that would carry the heavy freight traffic between each of the main lines radiating northwards from the capital without taking the trains into London.

At the end of the war and later with the creation of British Railways in 1948, the beginning of the decline was slowly put in motion. It did not seem like that at first as a number of welcome improvements were implemented. In 1953 the station entrance was made more spacious and accessible with direct access from the booking office to the bridge which was resurfaced and the balustrades boxed-in. Numbers 4 and 5 platforms were given new brick built refreshment rooms to replace the decidedly antique timber structures. Included in these modifications was the final lowering of the incandescence of portmanteau days to be replaced by the instant brilliance of electricity. The gaslight era had come to its end.

The steam shed typified the illusion of fecundity by having its roof rebuilt

Summer 1963. The lifting crane is on the 'down' fast after its work in removing the roof in preparation for the wires of electrification. Photo: Norman Sissons

and glazed in 1954 and being entirely demolished eleven years later!

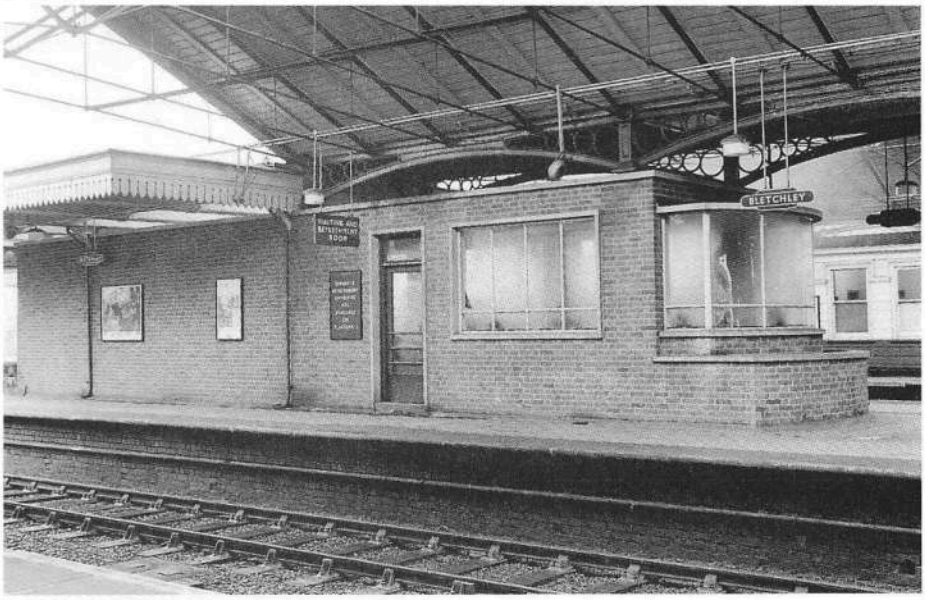
However these events were mere tinkering compared to what the planners envisaged in the 1960s.

Modernisation and Afterwards

The British Railways modernisation plan of 1955 included two large scale capital investments that would drastically effect Bletchley. The first was the 25kv electrification of the main line and all the implications that had for steam power; the second was the confirming of the effectiveness of the wartime cross-country freight link system at Bletchley with the construction of an immense flyover system from north of the station and climbing to a considerable elevation to clear the station and high tension wires to connect with the east-west link for the 'Oxbridge' line. Part of the scheme included a huge marshalling yard at Swanbourne three miles west of Bletchley. On January 15th 1962, the entire structure was brought into use, potentially for eighty trains a day. The fact that the part of the scheme that included the marshalling yard became defunct at the same time left the flyover playing a 'solo' duet!

As already mentioned, the real paradox to all this apparent rejuvenation was the fact that Bletchley's sphere of operation was steadily being run down. Passenger services ceased on the first branch line to Aylesbury on February 2nd 1953; between Verney Junction and Banbury on December 31st 1960; from Leighton Buzzard to Dunstable on June 30th 1962 and the Wolverton to Newport Pagnell link on September 5th 1964. Meantime, the 'Oxbridge' route was embattled with closure notices all through the 1960s culminating in the loss of the lines to Oxford and beyond Bedford to Cambridge in 1968. Bletchley steam shed closed on July 5th 1965 to be replaced by a diesel and electric depot sited alongside the Bedford branch. The demolition of the steam shed was not without a degree of irony — replaced with neat rows of parked cars, a quiet contrast after the animation of that thrilling gloom of steam goliaths and sunlight.

In the same year the station was finally denuded of its prominent signal boxes and its forest of semaphores as electricity took over that role as well, with colour light signals and the opening of the Bletchley power box in July controlling 33 route miles and 104 track miles.



Before the removal of the roof in the 1950s the old gas lit timber refreshment room on Number 4-5 platform was replaced with this smart brick structure. Photo: BRLMR

The station itself was drastically altered at the beginning of that momentous decade, most strikingly by the removal of the two sections of the huge LNWR roof with its characteristic strands of tie rods. The red and blue bricked Jacobean style hotel was demolished together with the arcaded front and replaced by bland modernity. Offices and rooms on No.8 platform were completely gutted and turned into a central booking-on point with locker rooms. Also closed were the 'Temperance Refreshment Rooms' or more colloquially — the 'Coffee Nob' where many railwaymen had spent their recreational hours. This was replaced by a railwaymen's club that was resited close by. The station post office was also closed.

Concerning the track layout, the No.1 platform had its rails removed and the remaining line on No.2 was severed and turned into north and south bay platforms allowing a concourse to be put between them. The north end allowed two loading docks, one for Post Office traffic and the other for parcels to enable the vans to back right up to the platform level. Bletchley station was also the first to have a new type of ticket control office and to be entirely re-signed with the British Rail black and white lettering style.

The most recent modification to the station was in 1981 when in July Lord Campbell of Eskan, Chairman of the Milton Keynes Development Corporation, opened new waiting room accommodation and a bookstall that had cost £76,000.

At the time of writing a few fragments of the major building programme of 1881 remain. Most prominent are the station buildings on the No.8 platform that still serves the Bedford branch; the platform and cast iron awning supports are also from the same period as is the forlornly isolated Stationmaster's house.

The bulk of the flyover and the mesh of caternaries have spoiled the open vista look of the days of steam. The impression now is of the raw utilisation of power, remotely generated, for bland obedient traction units. It is disarmingly effective, but shorn of all metaphor. Few, by choice, would not wish to see the distant gathering form of perhaps a Stanier 4-cylinder Pacific locomotive: the shape that accomplished the fullest expression of the main line tour-de-force in the declining years of steam. For many, these scenes are retained in vivid recollection, not easily assuaged by the passing years.

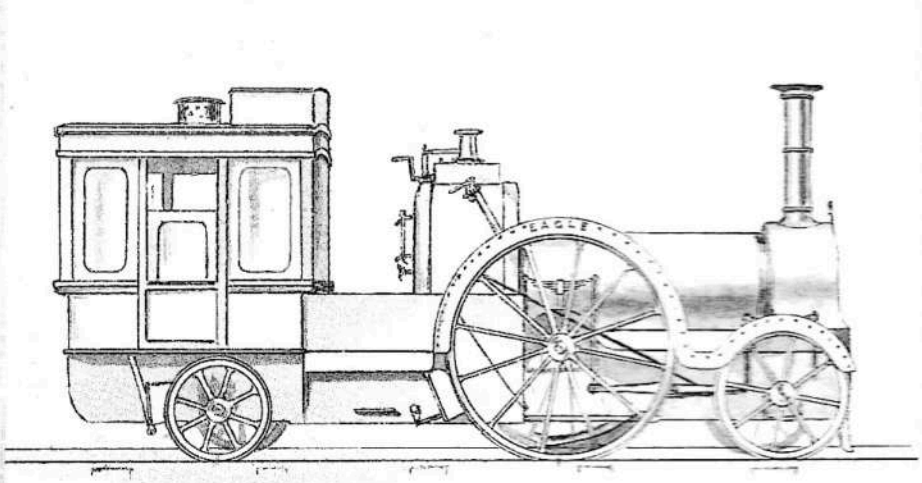
FOOTNOTE: Since completing the article I have received news from the Bedford to Bletchley Rail Users Association that Bletchley is to undergo another change. The Bedford platform is to be elevated onto the flyover to facilitate greater direct communication between Bedford and Milton Keynes via Bletchley and further, the prospective use of passenger trains from Oxford and Bicester. Consequently the little used freight route will acquire a new role for regular passenger train communication. It is a prospect with exciting possibilities.

Bletchley in the new age (1963) as D211 (Class 40) creeps between the bridge piers of the new freight route flyover that was completed in 1965. Photo: BRLMR

Rail motors, Sentinels and Auto-trains

by Tom Middlemass

The practice of combining locomotive and carriage in an attempt to achieve economies in light passenger work is nearly as old as railways themselves; for the undoubted progenitor of the railway steam car was William Bridges Adams, a gifted English inventor and locomotive engineer who returned home from convalescence in Chile in the year 1837. Six years later, at the age of 46, he established his Works at Fairfield Road, Bow.



2-2-2WT *Eagle* (Eastern Counties Rly). Author's collection

Pioneers

Adams' first product was a light manually propelled inspection car for James Samuel, engineer to Eastern Counties Railway; and, almost immediately, there followed a steam-powered carriage, named *Express*. Delivered to the ECR in April 1847, and later tested at speeds up to 47 mph, the latter soon became known as the 'Lilliputian'. An 0-2-2T, with inside cylinders and 3ft 4in driving wheels, it completed 5526 miles during its first twelve months and coal consumption averaged 3 lbs per mile. The floor of the carriage portion, which accommodated seven passengers, came to within nine inches of rail level! The following year further collaboration between Adams and Samuel witnessed the construction of a larger combined engine and coach, called *Fairfield*. This time 16 x 1st and 32 x 2nd class passengers could be taken aboard; though one presumes the carriage portion was articulated, for the overall length of the frames was 31ft 6in. Whatever, after trials on standard gauge metals, *Fairfield* was converted to 7ft gauge, whence it found a home on the Bristol & Exeter Railway. It was rebuilt as a separate engine in 1851.

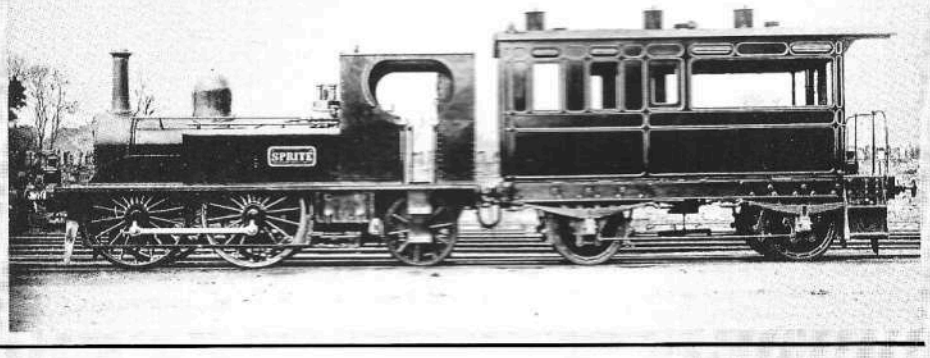
The two men's next joint venture was *Enfield*, a 2-2-0T built for the ECR in January 1849. The coach section, whose four compartments could hold 42 passengers, was supported by four additional wheels, and the total unit weighed 15 tons 17 cwts. Later that year, a 2-2-2WT, *Cambridge*, was delivered to the ECR. This time, however, loco and four-wheeled coach were separated; sharp curves and a rigid wheelbase, they had discovered, did not co-habit happily. Meanwhile, J & E Headley, of Cambridge, a firm normally associated with agricultural engineering, produced its one locomotive in 1849: 2-2-0WT, called *Eagle*, for the Norfolk Railway. Intended for tours of line inspection, albeit very little extra room was available on the footplate, it was later rebuilt by the ECR as a 2-2-2WT, and a small saloon was added. James Samuel made good use of it. Painted bright green, it found shelter in a shed near Angel Lane, Stratford, and lasted until 1868.

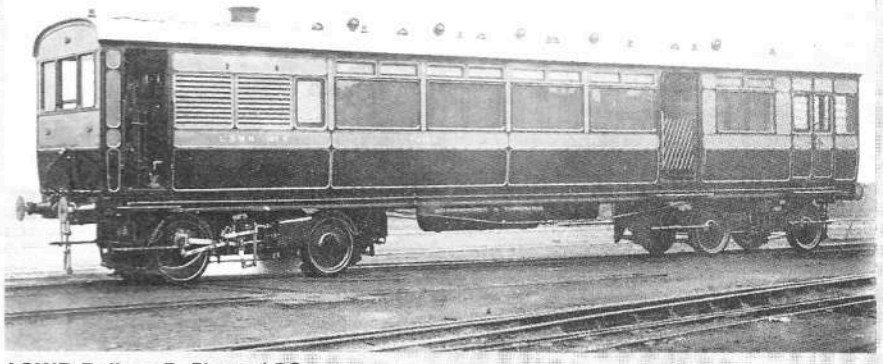
The next major entrant in the rail-motor field was Alexander McDonnell, Locomotive Superintendent of the Great Southern & Western Railway of Ireland. In 1873 he introduced a modest 0-4-4T called *Sprite*, with engine and saloon on one frame. Rebuilt latterly as an 0-4-2T, and fitted with a separate four-wheeled saloon, it found popular employment distributing staff wages in outlying districts. It must have been a tough little mite, for in 1929 it was still serving at Inchicore shed — supplying hot water for washing other engines! Then, in 1875, came the first of three McDonnell 0-6-4T rail-motors, designed to pull a few additional cattle trucks on the Castleisland branch: they soon attracted six-wheeled coaches, and a passenger service developed. In final form two of them finished up as neat little 0-6-0Ts.

Edwardian Days

For some time after that, despite considerable development in steam tram engines, the rail-motor concept lay fallow. Then, as a new century dawned, it brought with it a new menace — the electric tramcar. Railway suburban traffic soon became uncomfortably aware of its presence. One early victim of this new opposition was the Fratton-Southsea branch, operated jointly by L&SWR and LB&SCR: and Dugald Drummond watched, scandalised, as

GS&WR 0-2-4T *Sprite*. Photo: LPC





LSWR Railcar 5. Photo: LPC

passenger receipts thereon plummeted by 60%.

Typical of the man, retribution was swift. Drummond designed two steam rail-motors, and both were placed in service by mid-1903. Results were little more encouraging than before; but Drummond, never one for half-measures, absorbed what lessons there were to be learnt, and promptly followed up by ordering two steam rail cars from Nine Elms in December 1903. They cost £1,380 apiece. Within a year or so, his Locomotive Committee, apparently convinced that rail cars offered a solution to local passenger service problems, agreed to the construction of another 13 cars. They worked in various parts of the West country, but though working costs emerged at roughly half those incurred in operating conventional branch motive power, additional complications and expense involved in maintaining combined units far offset this advantage. Changing tack in 1906-07, Drummond then turned out 10 small 2-2-0Ts. These were separate units, designed to work 'push-pull' with light trailer coaches. Alas, the engines were much too light for the purpose and proved themselves uniquely capable of slipping to a standstill — even on the level! In 1913 Urie, Drummond's successor, converted half of them to 0-4-0T, and ultimately all but three of the ten were sold into Government use during the first World War. In the meantime, still convinced that small tanks could handle motor-trains, Drummond had ordered five 0-4-0Ts of slightly heavier dimensions. Two emerged in 1910, and, having failed once more to convince on branch work, they were sold for £1,350 apiece to the Ministry of Munitions in 1917.

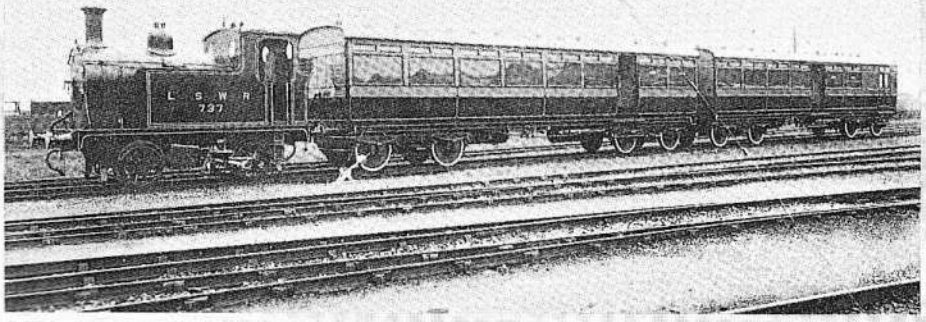
Curiously, the lack of success which attended the L&SWR's bold initiative with direct-drive rail-motors did nothing to prevent a positive 'railcar mania' from sweeping the country. Well within a decade, in fact, no fewer than 24 British railway companies succumbed to the craze. The GWR, most deeply committed of all, accumulated a fleet of 99 steam cars by 1908. Meanwhile, the Taff Vale gave Wales a vigorous lead, Scotland and Ireland took up the challenge, and even the Isle of Wight Central Railway dabbled experimentally. Indeed, of the major concerns only the GER, NER, NBR, and CR had the heart to resist; though the GER, of course, was already employing Worsdell and Holden-designed tram engines on the Wisbech & Upwell Tramway. Amidst all this activity, too, geared steamcars contrived to make a modest debut; in 1905 the Midland Railway ran trials with a 'Peebles' car, and the redoubtable Colonel Stephens inflicted his self-designed Pickering vehicle on the Kent & East Sussex Railway. In neither instance, however, was passenger comfort really acceptable.

Although the GWR built by far the bulk of the self-contained steam cars, most were subsequently converted to auto-trailers (below) and the most long-lived of the genre to survive largely as built were actually those of the LNWR and LYR, one each of which survived (just) into BR days. In many ways, the LYR design, derived in part from the Taff Vale type, was the most successful of all of them, having enough power to haul a second trailer if so required.

Post-Grouping Developments

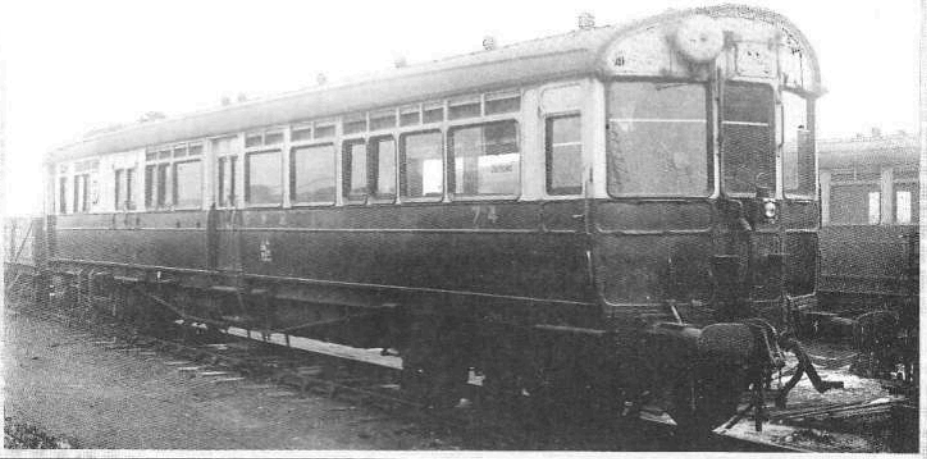
Came 1923, and the Sentinel Wagon Works at Shrewsbury chose to co-operate with Cammell Laird in supplying a 3ft gauge passenger steam car to Jersey Railway. This time chain drive was employed, the car could be driven from either end, and operating costs were 4d a mile. The LNER was immediately interested. The following year a new version of the Sentinel was exhibited at Wembley. It was given trials in Yorkshire; and the upshot was that the LNER eventually acquired a fleet of 78 Sentinel cars. Ranging in type from 2 and 6 cylinder, and 100 hp and 200 hp, and given names of famous stage coaches of the past, they ran throughout the 1930s in smart green and cream livery after a few had run in red and cream and others in 'ersatz' teak. Numbers, taken from LNER's coaching list, ranged, one recalls, rather bewilderingly between 21 and 51914! The LMSR followed suit rather more cautiously, by buying 12 100 hp cars. Maroon liveried, these Sentinels mostly confined themselves to the Northern Division and bore Nos.29900-91! A further 6 cylinder LMS car was purchased in 1928.

The last Sentinel steam car built for British railway use was commissioned, oddly enough, by the Southern Railway.



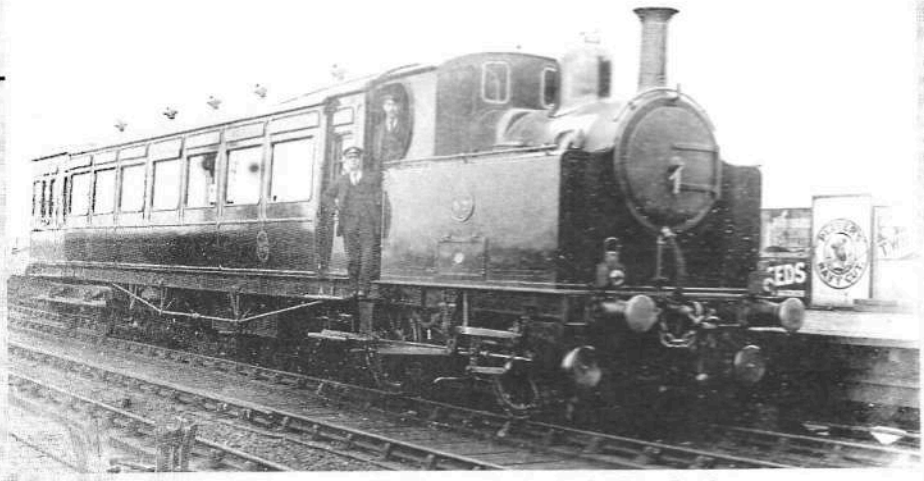
LSWR Class C14 Rail Motor. Photo: LPC

GWR Steam Car 74. Photo: LPC



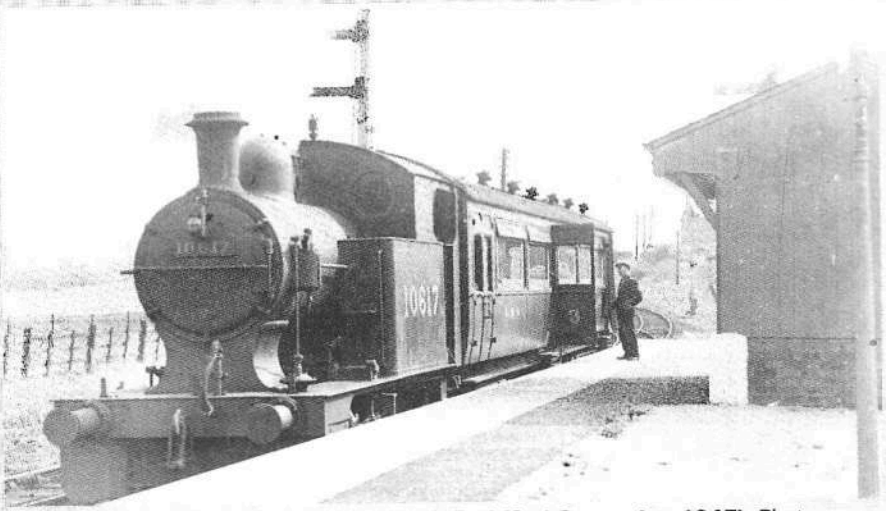
Radical in design it was put to work on the notoriously difficult Dyke branch on May 1st 1933. Built with bus body and tram-type seating, and costing £2,680, this Sentinel weighed only 17 tons, as opposed to the conventional 28¾; but it could still pack in 44 passengers. Heating arrangements, though, were somewhat spartan in the winter. Nevertheless, the car coped surprisingly well with a ruling gradient of 1 in 40. Indeed, success contributed to its downfall; for one day early in 1936 gross overloading resulted in a fractured frame. After repairs at Ashford, No.6, as it was known, was tried out on Dunton Green-Westerham service, where, strangely, it proved highly unpopular with enginemen and passengers alike. Rapidly reducing prestige finally culminated in inglorious failure on Colebrook Viaduct on the evening of April 22nd 1937; and, towed back to Tonbridge shed, the SR's Sentinel car never worked again; it hardly mattered, for by that time electrification of branch lines had become accepted SR policy.

During this busy decade Sentinel's only serious rival in steam car construction was the Clayton Wagon Co of Lincoln. Eleven Clayton cars were built for the LNER in 1927-28. They looked impressive with their side-rods and external coal bunkers; and they, too, were given stage coach names, though considerable renumbering was effected as some were transferred from one Area to another. In practice, however, they proved less successful in operation than the Sentinels, and all were withdrawn by February 1937. Six Clayton cars built for Ireland's Great Southern Railways achieved no greater distinction; for, disembowelled, they finished their days as two-coach articulated sets on the Waterford and Tramore line. Coincidentally, seven steam cars — four from NB loco in 1905 and three from Manning Wardle in 1906 — met a similar fate after serving the best part of a decade on the Great Northern Railway, Ireland's Dublin and Belfast local services.



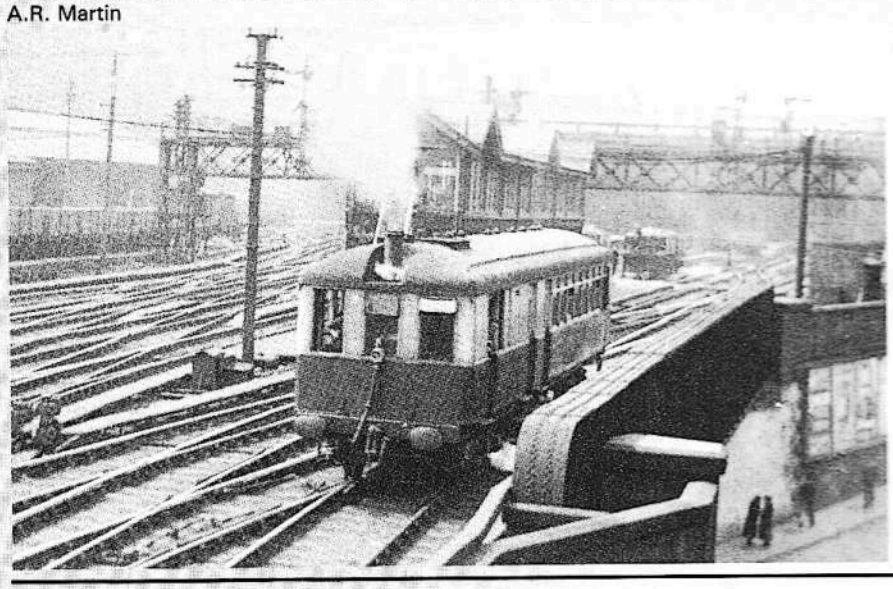
SECR Steam Railcar 2 at Chatham Central. Photo: Author's collection

Thus, despite the rail car 'mania' of the 1900s, and subsequent developments, steam-propelled vehicles never succeeded in shedding their one great weakness — lack of flexibility in meeting passenger traffic demands. Most could not handle an extra trailer should circumstances demand. Furthermore, however adequate or inadequate rail-motors were, they still devoured the services of 'passed' drivers and firemen; and it was this poor labour bargain which persuaded many railway Companies to look into the alternative merits of auto-train working.



LYR Rail Motor 18 (LMS10617) at Black Rod (2nd September 1947). Photo: Author's collection

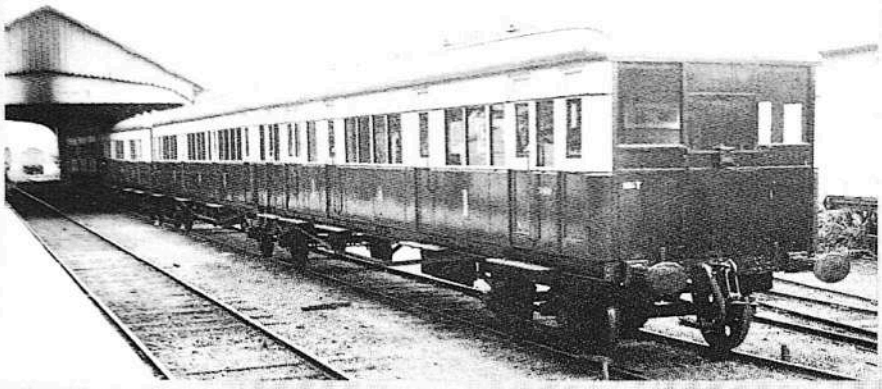
LNER Sentinel car 38 *Pearl* **leaving Edinburgh Waverley in August 1936.** Photo: A.R. Martin



Enter the Auto-Train

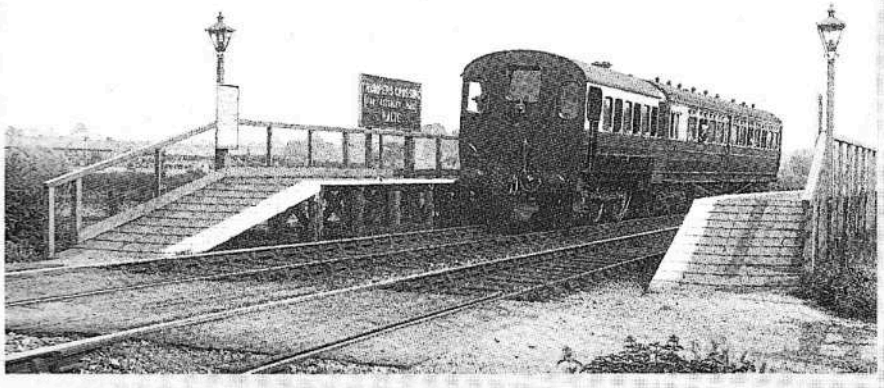
Cetainly the GWR, ardent though it was in the use of rail motors, did not hesitate to develop a parallel system of fitting ordinary locomotives for auto-train working, pairing them with trailers built originally for steam motor use. Older engines were employed at first. Then, by 1931-32, standard classes of 0-6-0PT and 0-4-2T evolved. Nor was the GWR alone; for on the LB&SCR a handful of 'Terriers' and 'D' tanks were selected in 1905 to conduct a series of motor-train experiments. The 'D' tanks proved the more successful, and many of the class were later modified. The Brighton line employed mechanical gear to start with, but graduated to the use of compressed air in 1912. The L&SWR likewise, deploying class 02 and M7 tanks on 'push-pull' trains, persisted with a less felicitous system of wires and pulleys. After the 1923 grouping, however, the SR gradually rationalised auto-working, and the more practical air-control system won the day. Even the GER, one of the few Companies which had resisted the earlier rail-motor craze, perceived distinct merit in auto-working some of its numerous country branch lines and, commencing in 1914, it fitted several 2-4-2Ts with compressed air equipment. As late in the day as 1949 British Rail also equipped seven veteran ex-GER F5 2-4-2Ts thus for auto-train use at Epping and Yarmouth.

By and large, because of axle load restrictions on lightly laid track, four-coupled engines found early favour for auto-work, and initial experiments with up to six coaches soon revealed that two, or three at most, made the most efficient formation. Occasionally a locomotive would be sandwiched



GS&WR, Ex-Clayton steam coaches at Waterford Manor Station. Two articulated pairs, with 360 nearest camera: 19th May 1934.
Photo: F. C. Le Manquais

GWR Auto-train at Trumper's Crossing Halte. Photo: LPC



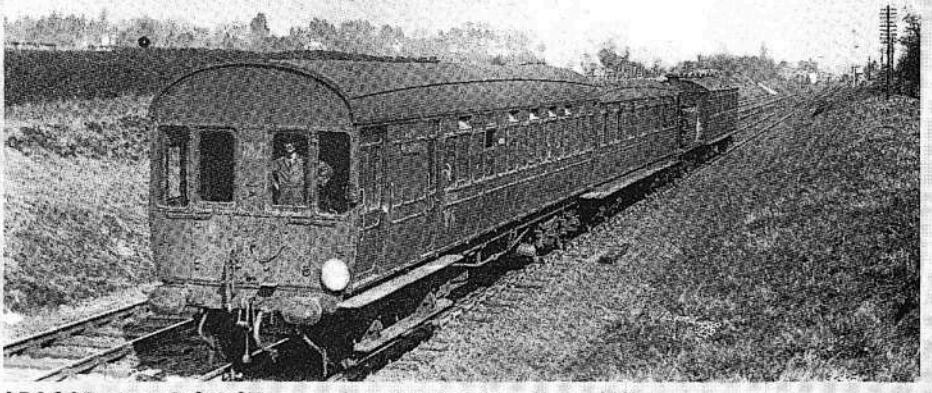
between coaches, but the practice of coupling a loco at one end and providing a duplicate driving compartment in the coach at the other generally prevailed. The important thing was that the need for a locomotive to 'run round' its branch train at frequent intervals had at long last been eliminated. Few people, in the 1930s, could possibly have foreseen that in a comparatively short time many of the branches themselves would be eclipsed!

Sentinel Shunters

Let the last word on steam-propelled vehicles lie, however, with a homelier breed — the shunting locomotive. Just as the LNER displayed the keenest interest in Sentinel steam passenger cars, so, too, that Company remained loyal to Sentinel where light shunting was concerned. The process started in 1925, when a four-wheeled, double-cylinder type was purchased for Departmental work. A frank development of Sentinel's well known steam road lorry, the locomotive employed the same vertical boiler and high-speed engine, while chain drive to 2ft 6in wheels ensured steady slip-free traction. Not only was the new Sentinel amenable to one-man operation, but it functioned very economically at a coal consumption of 15 lb per mile. Gresley was duly impressed, and four more were purchased in 1926. A further quartet, absorbed in 1927, took matters to a logical conclusion. Two, classified Y1 by the LNER, operated at single speed, while the remaining pair, introducing a new two-speed arrangement, offered a maximum speed of 36 mph in high gear. This was a particularly useful asset when the Y3s, as they were known, ran on main line metals between shed and yard.

All in all, results were so satisfactory that by 1933 the LNER had 15 Y1s and 32 Y3s working in its various yards up and down the country. Nine more Y1s were retained in Service Stock, and an interesting slant on LNER policy is afforded by the fact that 18 Y3s purchased in 1930 took the place of a proposed order for 20 conventional NER-type class J72 0-6-0Ts. Certainly the Sentinels served their masters well. Better, in fact, than the passenger cars; for, apart from a single withdrawal in 1946, all survived to be taken into BR stock.

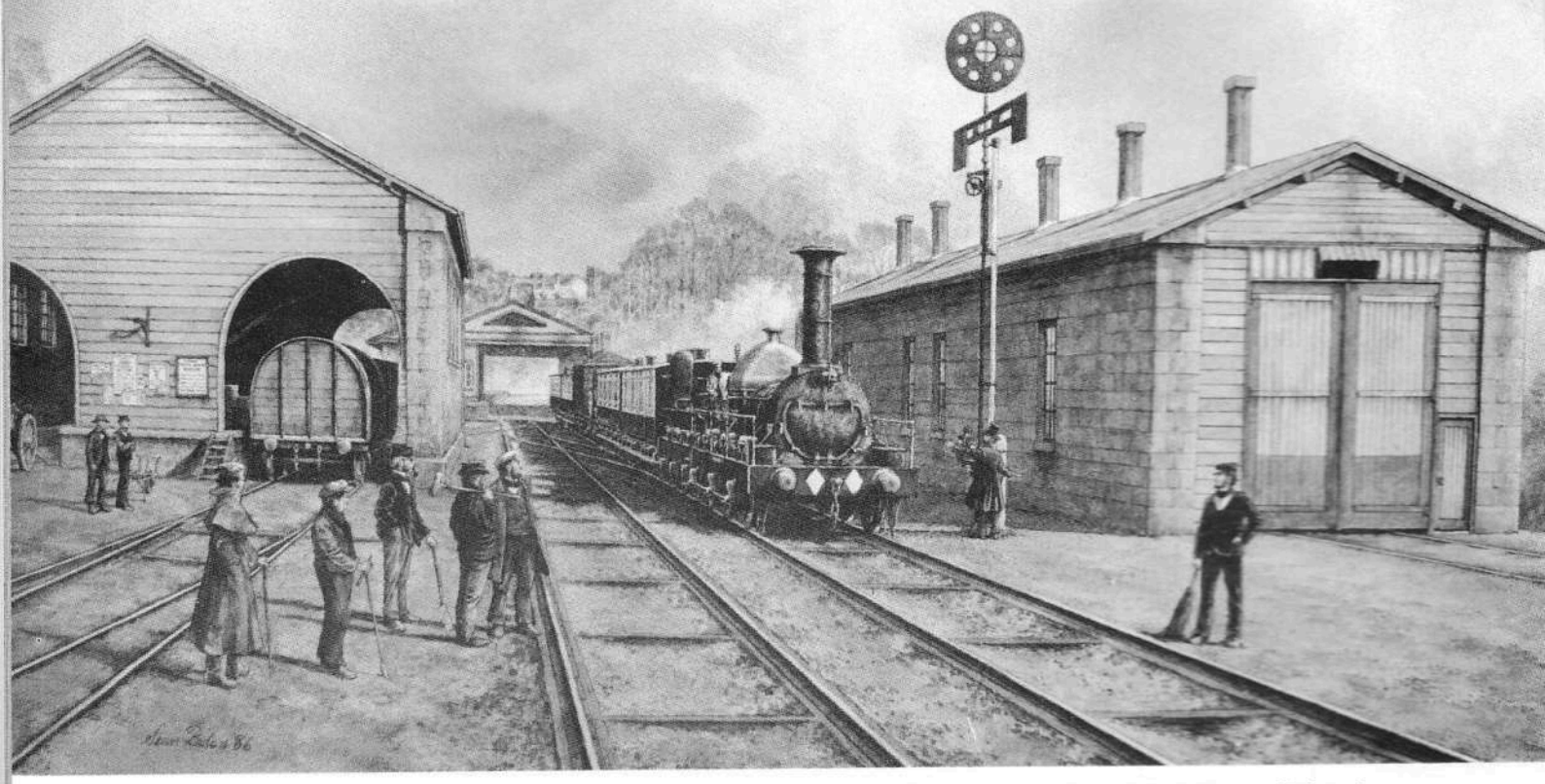
Two 'Super Sentinels', more powerful still at 200 hp, were also purchased by LNER in 1930. Double-engine, double-geared, and costing £2,360 each, they were intended for freight work on the Wisbech & Upwell Tramway, and, to meet legal requirements, they were accordingly fitted with cow catchers and protective skirting. Excessive fuel consumption, plus an unwelcome capacity for emitting sparks, ensured, however, that their stay on the Tramway was brief. Thus, by mid-1931, both Y10s could be found working on the old Union Railway quayside at Yarmouth. There, with very slight interruption, they ended their days. One only just survived rail nationalisation. The other, still bearing its 1946 LNER number, 8186, lasted until February 1952.



LB&SCR class D 0-4-2T on push-pull auto-train. Photo: LPC

LNER Super-Sentinel Class Y10 0-4-0T 8186 at Yarmouth on 8th July 1947.
Photo: T. Middlemass

DEVIZES



A painting by Sean Bolan set in the late 1860s of a train being signalled away from Devizes and past the engine shed headed by a locomotive of the 'Hercules' class (and watched by a motley crew of permanent way staff). Author's collection

P. STRONG describes the life and death of this attractive GWR county station

Frustrated by the fact that the promoters of the GWR had decided to route their line from London to Bristol via Swindon and not Devizes, prominent members of that market town renewed their efforts to get the new mode of transport to the town. Several proposals came to naught due primarily to lack of funds and even the Wilts, Somerset and Weymouth Railway Company (taking its line from Thingley Junction to the latter town) fell upon hard times and was forced to sell out to the GWR in early 1850.

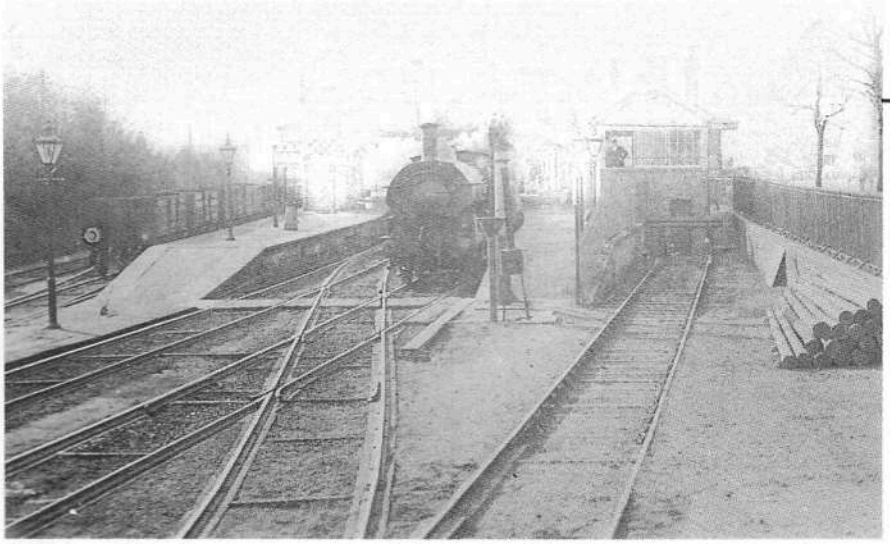
With the railway system only some six miles from the town as the crow flies, strenuous approaches were made to the GWR with the result that on Wednesday July 1st 1857 the branch line to Devizes was finally opened. Construction had been erratic and very expensive in particular a long embankment up Caen Hill at 1 in 50 about half a mile from the town.

The station itself was completed a year before the line was opened, built to the broad gauge, with all bridge abutments capable of carrying double track although it was single throughout. It left the Wilts, Somerset and Weymouth at Holt but at the time of opening no facilities were provided at this place, all trains running through to Trowbridge. Local records contradict this, stating that many folk travelled up and down the line on the day of opening. Devizes station itself was a substantial structure with an overall roof and two tracks running through as far as the high spur of ground on which stood the castle. Only one platform was provided, the roof resting on a high supporting wall on the far side. An engine shed with a single run through track was situated on the down side. A turntable was crossed en route to the shed and a short spur off the turntable would have accommodated one loco. These provisions would have been rather stretched as it was quite possible that at times five or six locomotives could have been present. A modest goods yard was on the up side before the station and this was provided with a large goods shed which survived the life of the line.

Early Services

The first timetable published in the Devizes Gazette showed eight up passenger trains to Trowbridge with no mention of the junction at Holt. The time given for the eleven mile journey was twenty five minutes with the exception of the 7.30 pm which took twenty two. Eight trains are shown arriving at Devizes during the day, four of these depicted as through trains from Paddington via Swindon and Melksham. There are however questions as to the running of these trains that I would like explained. From a departure time at Melksham and with a reversal at Holt some 2½ miles away, arrival at Devizes (a further eight miles, climbing most of the way) was only twenty two minutes later. This must have necessitated loco changes or run rounds slicker than the Race to the North!!

Excursion trains to Weymouth were being advertised even before the completion of the line and the first took place shortly after the line was opened. It received full coverage in the local press and must have been an accident looking for somewhere to happen. It took place on Wednesday July 15th and left Devizes at 7.45 am. The fares were "for the double journey" and were 6/-(30p) for First Class and 4/- (20p) for Covered Carriage. The train, headed by one engine was made up of 23 carriages and: "its centre occupied the station and its extended extremities stretched far up and down the line each side of the building". The thought of this train filled with upwards of a thousand people with a solitary loco at the head moving off down the gradient of Caen Hill leaves one very apprehensive. In that far off day ignorance in such matters as braking ability would have been the norm and it turned out that a grand day was had by all. The train needed three



A photograph taken from a postcard of the day full of interest: virtually all bridge rail and baulk road and the station's first footbridge. To the right of the signal box there is evidence of much activity with the construction of a larger up goods yard. The date is probably c.1900. Photo: Author's collection

locomotives to get it back up to Devizes that evening.

Weymouth remained a popular destination for day excursions and it was not until the powers that be decided that passengers were not needed by the railway that such day trips ceased in the late 1950s.

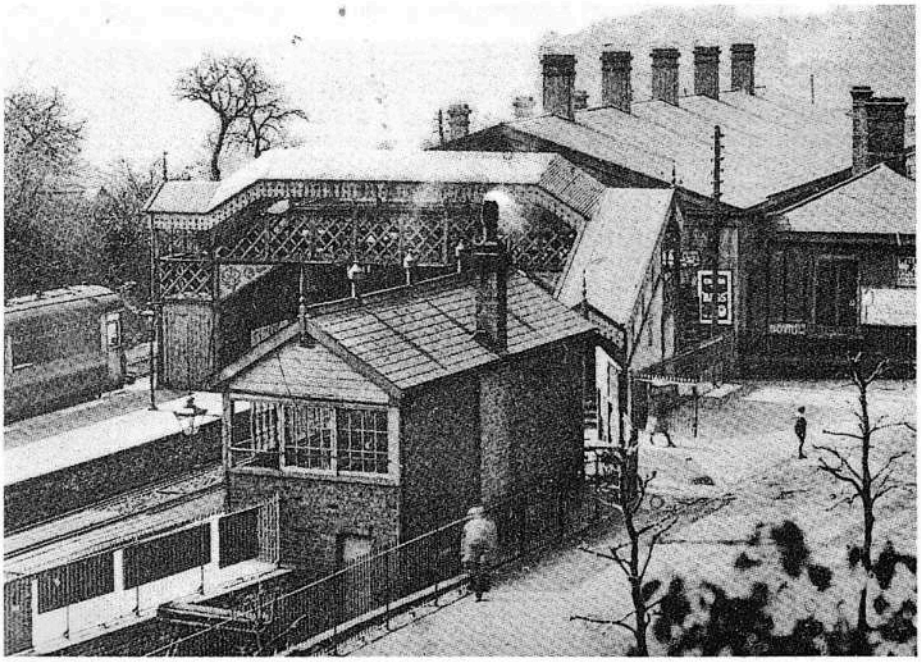
Effect of the Berks and Hants Extension

In November 1862 the Berks and Hants Extension was opened for traffic. Construction from Hungerford, 26 miles from Devizes, had finally finished with one of the main obstacles being the tunnel beneath the castle at Devizes. At last the town had a direct link with London 86 miles away. At this time trains from the B&H line terminated at Devizes and trains from Trowbridge did likewise; in addition to this the timetable showed 'UP' trains leaving Devizes in both directions! It was during this period that the engine shed must have been at its busiest. The townsfolk of Devizes seemed never to have been satisfied because now complaints rained on the GWR about the totally unsatisfactory freight service. Heavy charges were levied by the GWR on freight movement over the B & H E as compared with that via Swindon and Holt and it took eight years before some kind of compromise could be reached.

Gauge conversion took place on the weekend of June 27th 1874; again reports in the Devizes Gazette go against the general tide of opinion. Referring to the new line, narrow gauge, (yes, 'guage'), the report says: "Everybody who has travelled over it bears testimony not only to the smoothness with which it runs but to the surpassing excellence of the carriages". There can be little doubt that the broad gauge had been allowed to deteriorate to a rather poor state both in respect of track and rolling stock. At this time the track layout was again altered and for a while the tunnel was host to double track, one being a siding which ran the full length with buffer stops out in the open air at the far end. Also at this time Devizes boasted two signal boxes. One was situated on the left hand side of the tunnel mouth and the other was on 'stilts' above the track leading into the goods shed.

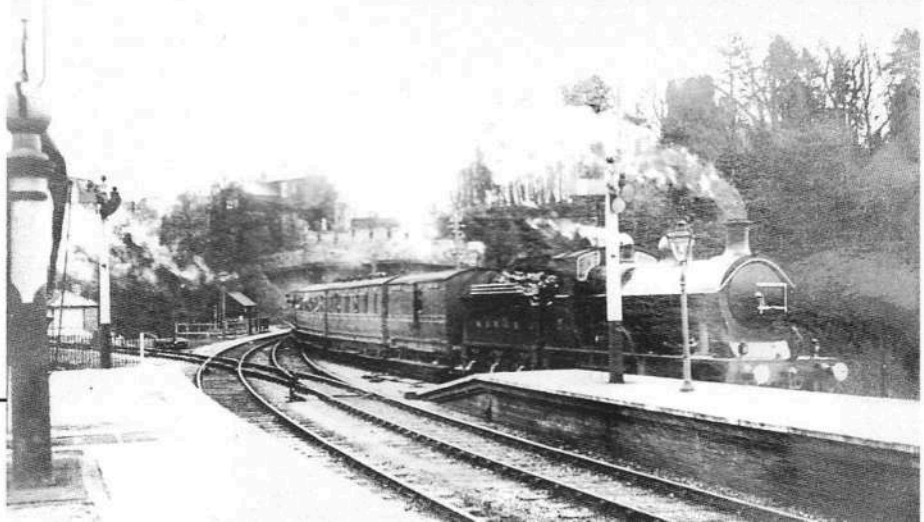
Towards the end of the nineteenth century a great deal of railway activity was taking place in and around Devizes. The B & H E was being doubled and in places re-aligned and there was construction of a new route which would by pass Devizes and go direct to Westbury through Lavington and Edington & Bratton. This was opened on October 1st 1900 and, contrary to what the townspeople anticipated, brought about some of the quickest timings from the Metropolis. In 1902, a coach was 'slipped' off the 9.35 Paddington to Weymouth express at Patney and Chirton, the station where the new route diverged, and was worked into Devizes where it arrived exactly two hours after leaving London. However things improved still further and in July 1906 an express from Paddington to Weston-Super-Mare was routed via Devizes and, calling only at Reading and Newbury, covered the 86 miles to arrive in 1 hour and 51 minutes after its London departure time. This time was never bettered, although an express from Paddington continued to run to Weston via Devizes until the early 1960s.

In 1901 the GWR and the MSWJR signed an agreement allowing locos and trains of each others companies to work between Ludgershall, on the latter's system, and Devizes and Westbury on



This postcard view is slightly later than the previous one depicting the 'Buffalo' tank on the freight. A rail motor can be seen and they came into regular service on the line in 1906 having proved satisfactory in earlier trials. Photo: Author's collection

MSWJR 4-4-0 7 at the head of a troop train composed of MSWJR rolling stock enters the 'back platform' at Devizes. Although the date is not known, from details shown on this photograph it was almost certain that it was taken during the November-March period of 1913/14. Photo: Author's collection



the GWR. This was doubtless to facilitate the vast amount of military traffic that was building up both on Salisbury Plain and in the garrison town of Devizes. Military personnel and POW resulted in the running of many specials from the turn of the century and particularly during the build up to the world wars and intervening years. In addition to the normal run of merchandise carried by the freight train, milk specials ran as did trains conveying fodder for horses in the First World War. During the Second World War, train loads of tanks and military armaments would arrive and depart daily from Devizes.

Major Layout Changes and Busy Times

Just before 1914 considerable alteration took place at the station. A major re-organisation of the track layout took place which was to last virtually unaltered until the closure of the line. Also around this time the overall roof of the station was removed and a single signal box replaced the two previously in existence.

By the 1920s the station had a staff of nearly forty and was a very busy place.

The new route to Westbury was not without its problems, it having been built through some very unstable strata. On numerous occasions due to landslips and drainage work, trains would have to be re-routed through Devizes. By the time the 1950s had arrived, the internal combustion engine was really making its presence felt. Posters heralding a new class of express locomotive were emblazoned on the station walls and hoardings as news of the standardisation of British Railways locomotive fleet was being announced. At the same time, freight services were being curtailed and passenger trains were carrying less. Only a few years later the steam locomotive was being ousted and Beeching was paring away at the railway system. It was, ironically enough, while this run down was taking place that Devizes had its finest railway hour.

On the night of August 22nd 1961 a tall embankment just east of Crookwood signal box collapsed. This particular embankment had been giving trouble for some months and a 5 mph speed restriction was in force. Grouting had been taking place for weeks prior to the slip but, if anything, only aggravated the situation. In the early hours of the morning of the 22nd, a west bound freight crept over the unstable track and according to the guard "I felt the road

General view through the station, looking west towards Holt. Photo: P. Strong

The western end of the station, showing a fine array of characteristic GWR structures and buildings. Photo: P. Strong

The signal box. At some date the upper part of the structure was raised by about 10 courses of bricks. Photo: P. Strong

give. It seemed as if the van was pulled out of a hole". Such was his comment to the signalman at Lavington, having brought his train to a stop. Examination showed a section of the down line suspended in mid air where the embankment had slipped from beneath it. Total closure of the main line for many weeks in the busy summer season followed and entailed the diversion of all trains during this period.

Devizes took the brunt of the diversions, being routed to saturation point, while other trains were sent via Swindon, Melksham and Trowbridge. Locomotives classed 'double red' were barred from the branch, although at this time the King class 4-6-0s were pretty much phased out from the west of England main line. The other 'double red' class, the 47XX 2-8-0s, were not frequently noted in this area although much of their running was at night. It was without doubt the busiest time in the history of the line and the signal box was kept open round the clock.

During this time, I was fortunate enough to spend one night in company with Bert Clack, one of the regular signalmen and watch the activity. At one stage in the early hours a freight was standing at the outer face of the island platform, a 13 coach up express double headed by a Hall 4-6-0 and a Warship had set back into a siding (13 coach trains were too long to pass a down train in the station itself), a Castle at the head of a west bound express was for some reason taking water at the down platform and the rear of its train was preventing the departure of the up express; meanwhile, 'out of section' was being belled back from Holt Junction for the preceding westbound train. If only I'd taken notes instead of just absorbing the atmosphere! It was this same night that I saw my only Britannia class locomotive on the line. This activity lasted until mid-September when a

A general view looking east from the top of the inner home signal. Photo: P. Strong

A composite of the exterior of the station taken from the original approach road. Photo: P. Strong

limited number of trains were being permitted over the repaired embankment. Site work here went on night and day with many of the ballast and spoil trains running via Devizes to gain access to the eastern side of the slip.

Decline Sets In

By now Beeching's Axe was well and truly beginning to cut, with services on many branch lines having been withdrawn. I secretly hoped that the Devizes line would remain intact because of its usefulness as a diversionary route but this was not to be, although it did survive longer than many. The 'highlight' of 1962 and 1963 was the running, six days a week, of a heavy blue circle cement train. This train, originating from Hoo Junction, was destined for Severn Tunnel Junction at the time of marshalling yard improvements and the construction of the huge steel complex at Llanwern. All heavy types of Western Region freight locomotives headed this train including the BR 2-10-0s and WD 2-8-0s. Once the cement works at Westbury 'came on stream' this working ceased. The last steam working on the branch came to an end in 1964 with the withdrawal of the freight service in October. DMUs provided what limited services remained. A couple of specials, both headed by Halls, traversed the branch in April 1965 with just a year left.

Further retiming of the few remaining passenger services made them virtually useless to anyone other than the enthusiast or the most stalwart of railway travellers. In July the signal box closed with the retirement of the two signalmen, both having served the railway for many years. With Devizes no longer a passing place the timetable was again revised — and how. In accordance with BR policy to drive passengers away from services that they wished to close, the following example is worth noting. The 9.36 am from Westbury to Patney via Devizes was timed to stand at that station for 24 minutes from 10.16 until 10.40, this being for no other reason than to ensure that it missed making a connection at Patney and Chirton with the 10.28 am Westbury to Newbury which left Patney at 10.45, the Devizes train arriving some five minutes later. The next Newbury train was around 4.00pm!

Although the railway life of Devizes had hung on tenaciously for the last three years, it finally came to an end on the evening of April 16th 1966. Virtually no one was using the trains, Devizes station had been reduced to a single manned halt and when the 7.36 pm Newbury to Westbury left, the small crowd had witnessed the end of an era. I was at Patney to see the branch boards pulled off for what I thought would be the last time. A couple of folk joined the train in the darkness; it pulled up to the signal box and the last lot of documentation was handed over along with the token for the trip to Holt. The door was slammed and the DMU purred away across the up main and on to the branch the red lamp fading into the misty damp night.

Bill Brooks bade me farewell and I wondered how he felt as I sped down to Holt on my motor cycle. He had spent a lifetime on the railway starting as lad Porter at Devizes in the twenties and now it was all over; I hoped he was looking forward to retirement. A few people had gathered at Holt and there were a number of cars in the car park. I made my way to the signal box in time to see the lights of the DMU emerge from the gloom accompanied by a couple of bangs from detonators, with muffled cheers from the platform. The train stopped by the box and the token was handed over in return for a small sheaf of papers. The DMU eased towards the station again accompanied by more exploding detonators. After a while it

The exit tracks from the goods shed, right, and the up goods yard, left, at the point where they merge and join the up main just beyond the foot crossing. The building immediately above the buffers at the cattle dock is part of the original station. Photo: P. Strong

moved off to the muted cheers of the onlookers, a single blast on the horn and it was gone, forever, into the night. Behind it was left a legacy of closed stations in Wiltshire and a number of people out of work, although ironically the fact that a line had closed meant work for those who dismantle them; but it is not a job that would appeal to me.

Postscript

There is a postscript to this however. Where I lived in a small village called Stert not far from Patney, the remains of the branch were only about one hundred yards away. It was some six weeks since the line had closed and the track was rusty and weedy. It was a fine June evening and pausing from my labours in the garden, I imagined I could hear the throbbing of a heavy diesel locomotive in the distance towards Devizes. The main line itself was only about half a mile away and when the foliage was off the trees it was easy to hear and see trains using that route. It soon became apparent that I was not imagining that I could hear a loco approaching as the sound increased rapidly in volume. I must confess to being somewhat rooted to the spot as the apparition came into view. Two immaculately turned out class 52 Western class diesels, D1010 *Western Campaigner* and D1041 *Western Prince* moved purposefully past en route to Patney.

Getting my brain into gear I rushed indoors, grabbed my camera, leapt on the motor bike and set off for Patney. I

The sleepers are from the recently lifted head shunt up to the old cattle dock immediately below the water tank. This tank was supplied with water from the Kennet and Avon canal which was owned by the GWR and 'fed' the two water cranes, one at the London end of the up platform and the other at the western end of the down island platform. The goods yard weigh bridge and hut is centre. Photo: P. Strong

A fine study by the late Peter Fry of 'Hall' class 4-6-0 5973 *Rolleston Hall* **standing at Devizes with the 1.52pm Newbury-Westbury train in November 1957.**

The Cornish Riviera Express is seen here entering Devizes during the diversions of August/September 1961. It is headed by Type 4 North British A1A-A1A D604 *Cossack.* Photo: the late Peter Fry.

Type 3 'Hymek' diesel-hydraulic D7040 entering Devizes at the head of the 7.10am Trowbridge to Paddington train. A BR Standard 2-10-0 waits with the 'Cement' for the token before moving off — October 1964. Photo: P. Strong

knew I had no hope of getting there before the two engines, but if they were held because of traffic up the main well perhaps there was a chance. In reality there was no chance, but I did go to the signal box seeing it was still manned. That too was less than prudent!! Seeing my approach, a man likened only to an SS officer told me in no uncertain terms where to go!

I returned home still none the wiser as to the reason for the passing of the two Westerns. I had to leave for work early the next day but my mother told me that the two engines worked back that morning. It later transpired that a Royal Train had been stabled for the night on the Devizes branch a short way from Holt Junction.

Early in 1967 the lifting of the branch started at the Patney end, BR providing trains for the lifted track although the actual demolition was being done by a private contractor. The station and its buildings in Devizes had been badly vandalised with timber and glass being smashed and strewn all over the place. I was away from the locality for much of this time and only had one extended weekend in which to record the passing scene. On the two occasions that I photographed the demolition train it was headed by 'Warships', one was *Champion* and the final one *Glorious*, a rather cynical choice of names with which to end a fascinating era. The station site is now a bus, car and lorry park and the tunnel beneath the castle is, despite it not being straight, a shooting range! Ironically it was here that the perpetrator of the appalling Hungerford tragedy carried out his shooting practice. On a happier note, on one occasion I gave a slide show on the railway within the confines of the tunnel. The up goods yard is host to blocks of maisonettes and to the uninterested outsider there is nothing to denote that a station ever existed. Oh, I almost forgot, Station Road would give the visitor the necessary clue.

"Catch!" Bert Clack tosses the token for the Devizes-Holt Jct section to Harry Groves, the driver of the 6.45pm Devizes to Westbury train in June 1965. Photo: P. Strong

Pressed Steel Co. Motor Second W51383 is the leading power car of two 3-car suburban sets coupled in multiple, that formed the 6.58am Trowbridge to Paddington (SO). On weekdays this train only ran as far as Reading General. At the down platform can be seen the 8.00am 3-car DMU to Trowbridge — June 1965. Photo: P. Strong

SIGNIFICANTLY SOUTH WESTERN

Although the Southern Railway was probably best known for its electrification in the 1930s, these two contemporary colour views serve as a strong reminder that the company also inherited several types of steam locomotive from the LSWR which foreshadowed much later 20th century practice. Class L11 4-4-0 408 is in the classic Dugald Drummond 'Scottish' tradition and was built in 1906 as one of a series of 40 engines which were given Class T9 boilers and smaller (5ft 7in) driving wheels specifically for mixed traffic use — a very modern idea at the time.

Equally significant was Robert Urie, another Scotsman, whose fine work is represented here by Class H16 4-6-2T 516, built in 1921. There were only five of them, but like his more familiar and numerous 4-6-0s, such as those which later became part of the famous 'King Arthur Class', they displayed two outside cylinders with Walschaerts valve gear — an idea which Urie very much helped to pioneer and which eventually became the standard British form for a 'modern' two-cylinder steam locomotive.
Photos: P. Colebourn collection

TRANSITION

GWR at

Plymouth Laira shed was opened in 1901, having a large 28 road roundhouse (right) and a straight shed with four long roads. When the diesel-hydraulics were introduced, two roads were adapted for their use in July 1958, the remaining two being similarly treated by December 1959. Originally having an allocation of 100 locomotives, on this day (Sunday 17th July 1960), the shed contained 44 steam and 19 diesel locomotives. Of these, the 4-6-0s included four 'Castles', ten 'Halls', seven 'Granges' a 'County' and a 'Manor', while only three 'Warships' were present. Class 03 diesel D2128 (later 03128) is in the foreground.

Laira shed was home to four of the five '1361' Class 0-6-0STs for most of their lives, two being normally outstationed at Plymouth Docks shed until its closure in early BR years. These short wheelbase engines, designed to work in restricted areas, were built at Swindon in 1910, the last saddle tanks turned out there. No. 1363 was in use as shed pilot on 30th April 1961, a duty which included a trip freight to and from Tavistock Junction yard mainly to collect locomotive coal, oil and mechanical spares. All were withdrawn 1961-2 and 1363 is preserved at Didcot.

Class 42 diesel-hydraulic 'Warship' Class D823 *Hermes*, built at Swindon in July 1960, stands on Laira shed, 30th April 1961. By this time these engines had replaced the 'King' Class 4-6-0s on West of England expresses. Laira lost its last allocation of 'Kings' in the summer of 1961 and these once famous engines were all officially withdrawn the following year. Because the 'Warships' were not a standard class and had a poor record of reliability, all were withdrawn by the end of 1972, *Hermes* having been broken up at Swindon in May of that year.

LAIRA

R.C. Riley illustrates and describes the changing scene at this famous GWR location in the 1960s.

Since Plymouth was suffering less competition for skilled labour than London, Laira was chosen as the WR's first main diesel maintenance depot. On 29th August 1961 the new depot is seen taking shape. It was progressively brought into use, part being available for DMU maintenance by October 1960, DMUs having replaced steam push and pull trains on the Saltash service that June, prior to opening of the Tamar road bridge. By comparison, on the Sunday the shed contained 32 steam and 23 diesel locomotives, including six 'Castle' and four 'County' 4-6-0s with nine 'Warships'. On a visit two years later the roundhouse contained two steam engines. Opening of the new diesel depot meant that the straight shed contained only withdrawn steam engines, while three engines were in steam in the yard. The steam shed closed in April 1964.

ABOVE: Blackpool Central shed on 26th December 1963 saw, amongst other things, two of its own Class 5 4-6-0s (44733; 44737) in residence along with a 'Jubilee' 4-6-0 (45578 *United Provinces*). The Class 5s are both from the 1949 BR-built series and one of them is being lit up for the next day's working to Manchester. The 'Jubilee' is a visitor, believed to be from Newton Heath.

"There's a famous seaside town called Black

BELOW: On 7th March 1964, 42754, one of the surviving Horwich 'Moguls' (more familiarly known as 'Crabs'), is seen at Ansdell and Fairhaven with the 12.45pm (SO) Blackburn to Blackpool Central train — a typically motley formation of the pre-DMU era, consisting of LMS and GWR design non-corridor stock (GWR type in the centre). The line was formerly LYR/LNWR joint but the station is very much in the characteristic L&Y island platform style. The line is still in use by the station buildings were demolished in the early 1970s.

pool...

A photo-feature by **Peter Fitton** taken during the last year of steam working prior to Blackpool losing its steam allocation in September 1964.

ABOVE: In this view, 'Jubilee' 45565 *Victoria* from Low Moor (ex-LYR, Bradford) leaves Blackpool with the 3.15pm Sunday return 'Illuminations Special' to Leeds and Bradford in the Autumn of 1964. This train left Leeds and Bradford on Friday evenings, the two portions being combined at Mirfield. *Victoria*, one of the last of the famous handful of surviving 'Jubilees' in the old West Riding during the mid-1960s, was always kept spotlessly clean at the time and is seen here bearing the yellow cabside stripe denoting its prohibition 'under the wires'.

RIGHT: On 7th March 1964, Stanier 'Jubilee' 45705 *Seahorse* is being watered in the morning sunshine prior to working a Manchester train. The engine was shedded at Blackpool from the mid-1950s but was re-allocated soon after this picture was taken. It later became familiar on the Buxton-Manchester business trains in 1965. Note too the shed roof, fitted in the late 1950s after modernisation.

ABOVE: Former Great Northern Railway (Ireland) Class S 4-4-0 170 *Errigal*, standing at Amiens Street shed, Dublin in June 1960, clearly demonstrates the improved effect which a contrasting colour, sympathetically applied, can have on a blue engine. Note the stencilled lettering on the front buffer plank — applied when 170 came into CIE stock after the GNR was dissolved in 1958. It was later bought back by the Ulster Transport Authority in 1963 and scrapped in 1965. Photo: K.R. Pirt/K.R. Photographics

TRUE BLUE?

David Jenkinson offers a strictly personal retrospective of an historically uncommon railway colour.

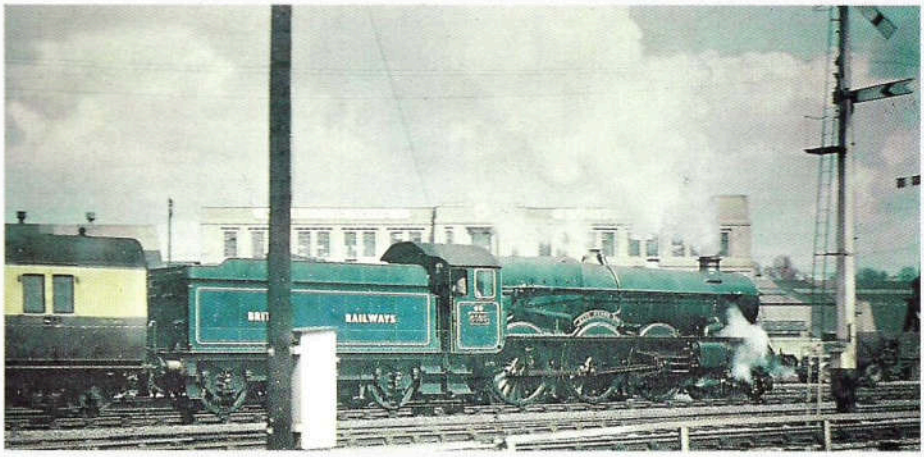
Since the mid-1960s, travellers have become accustomed to seeing many shades of blue on the modern railway — indeed at one time in the late 1970s one could see little or nothing else. But historically speaking, blue was not a particularly well-favoured colour in the steam age and had to be handled with great care to achieve a good effect. Significantly, one feels, it was usually applied to the locomotive only, not the whole train. Only two pre-group companies (the Somerset and Dorset Joint and the Furness Railways) used blue for carriage stock (the FR with white panels and old gold lining) and only one of these (the S&D) put it on the locomotives as well — also with gold lining. Its blue carriages were even further enhanced using vermillion edging and gilt lining.

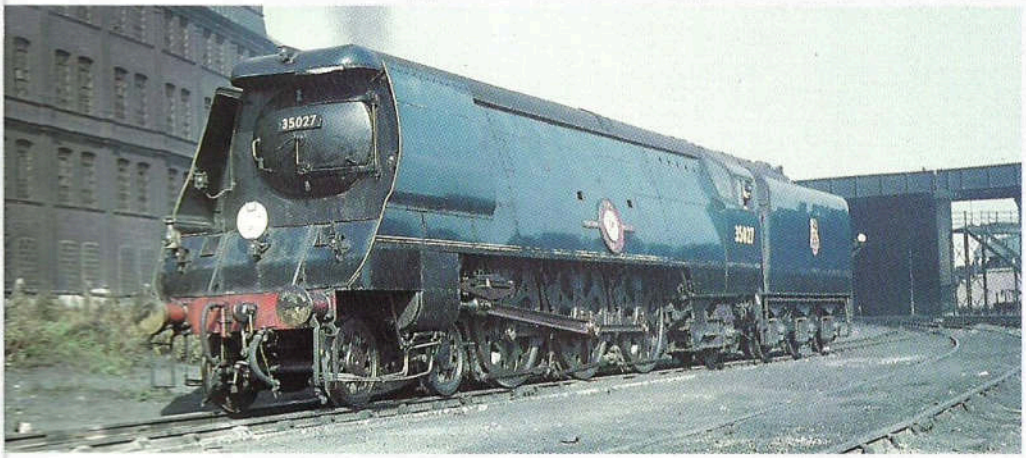
The most celebrated users of blue liveries (and handsomely they succeeded) were probably the Caledonian and Great Eastern Railways and both, happily, chose to confine it to the locomotive only, taking care to embellish their chosen styles with the restrained use of other colours too — dominantly red. This, like the gold lining of the FR and S&DJR, immediately 'lifted' the visual quality, something which more recent applications of blue have notably failed to achieve. The more well known blue LMS and LNER streamliners of the 1930s were hardly an aesthetic masterpiece (I saw them both and actually rode in the LNER version); while the least said about the modern corporate BR blues the better!

I have the sort of feeling that the historical railways knew instinctively that blue is essentially a cold colour, needing some contrasting colour to 'warm it up'. In consequence, when used at all in former days, it was usually given very sympathetic treatment and thereby 'came-off'; furthermore, the precise shade of blue itself seems also to have been given careful thought. But these historical precedents did not seem to have been fully appreciated in later years and most recent railway applications of the colour in this country seem to me to have been woefully lacking in visual appeal.

Just after the second world war, the steam railways of mainland Britain indulged in yet another flirtation with blue liveries and the collection of views opposite serves as reminder of their various efforts. Would I be mischievous in claiming that on the whole they were not very good and that BR would have done better to copy the GNR(I) examples from across the Irish Sea whose livery (with more than a hint of the old Caledonian style) was adopted well before the war?

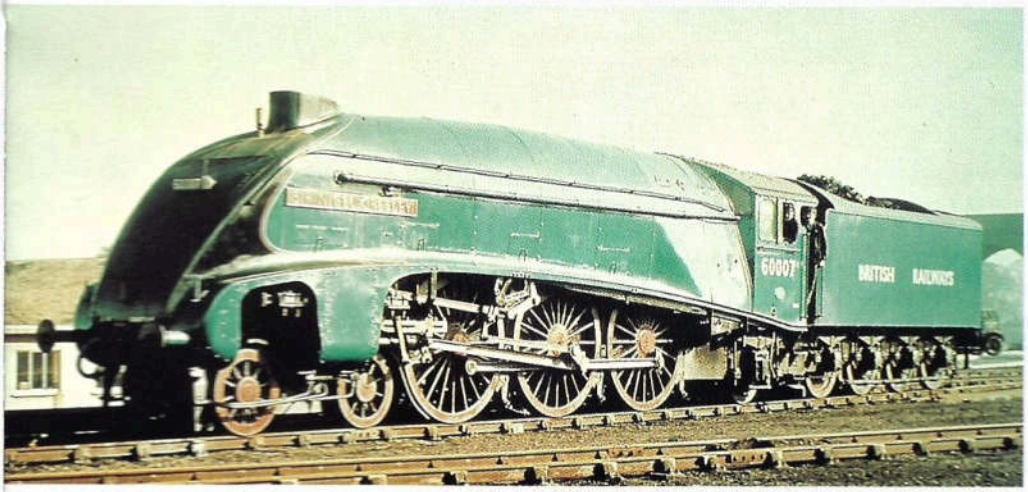
RIGHT: Nobody liked the blue GWR 'Kings' very much in any of their forms, though when arrayed in the experimental dark blue 1948 shade, the LNWR-inspired red, cream and grey lining did give a bit of richness and character which was lost when succeeded by the later standard blue with black and white lining; in fact, when combined with chocolate and cream carriages, the end result was by no means bad. Such an ensemble is represented here by 6025 *King Henry III* leaving Chippenham in 1950. Photo: K.H. Leech/Colour-Rail



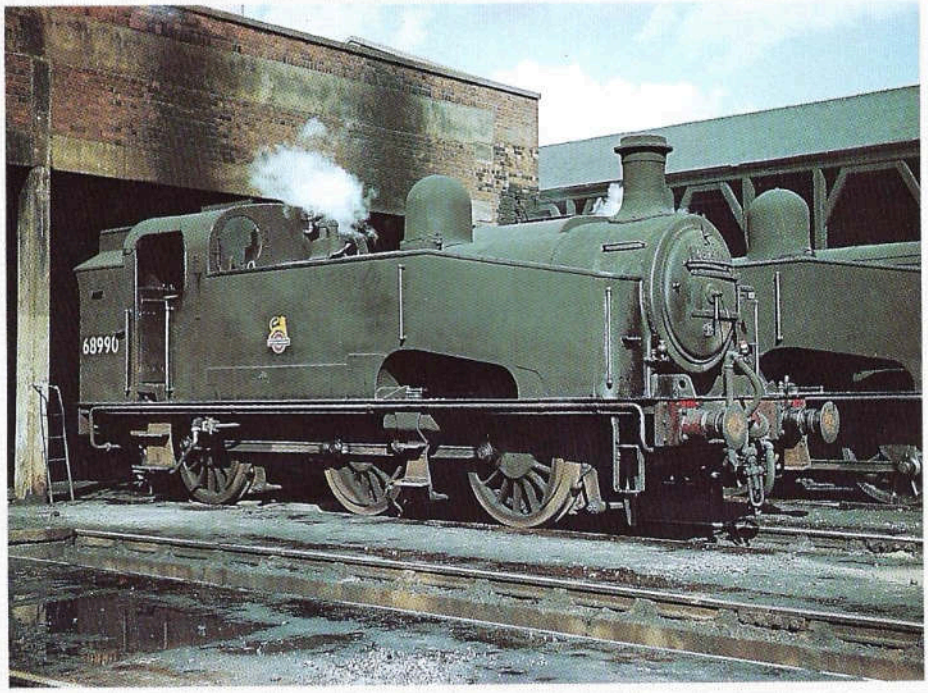


LEFT: Compared with the distinctive malachite green and bright yellow stripes of the Southern (whether or not one approved of that shade), the 'Merchant Navies' in BR standard 1949 blue livery with just a simple black and white line had very few redeeming aesthetic features. Only the red nameplate and front buffer plank of 35027 *Port Line* relieve the monotony; but then some would argue that the later BR system was not much better in this respect when applied to the air-smoothed casing! Photo: Click Collection, courtesy NRM.

RIGHT: The LMS 'Duchesses' were another class where a bit of extra colour would have helped improve the BR standard blue. The colour shade and lining were meant to suggest the old Caledonian and as a colour, it quite suited the style of the locomotives themselves (better than BR green some reckon); but how much better had they been given either red wheels or red footplate edging. This view shows 46254 *City of Stoke-on-Trent* leaving Rugby in 1952, having been one of the last to receive the blue livery, late in 1951. Photo: Click Collection, courtesy NRM.



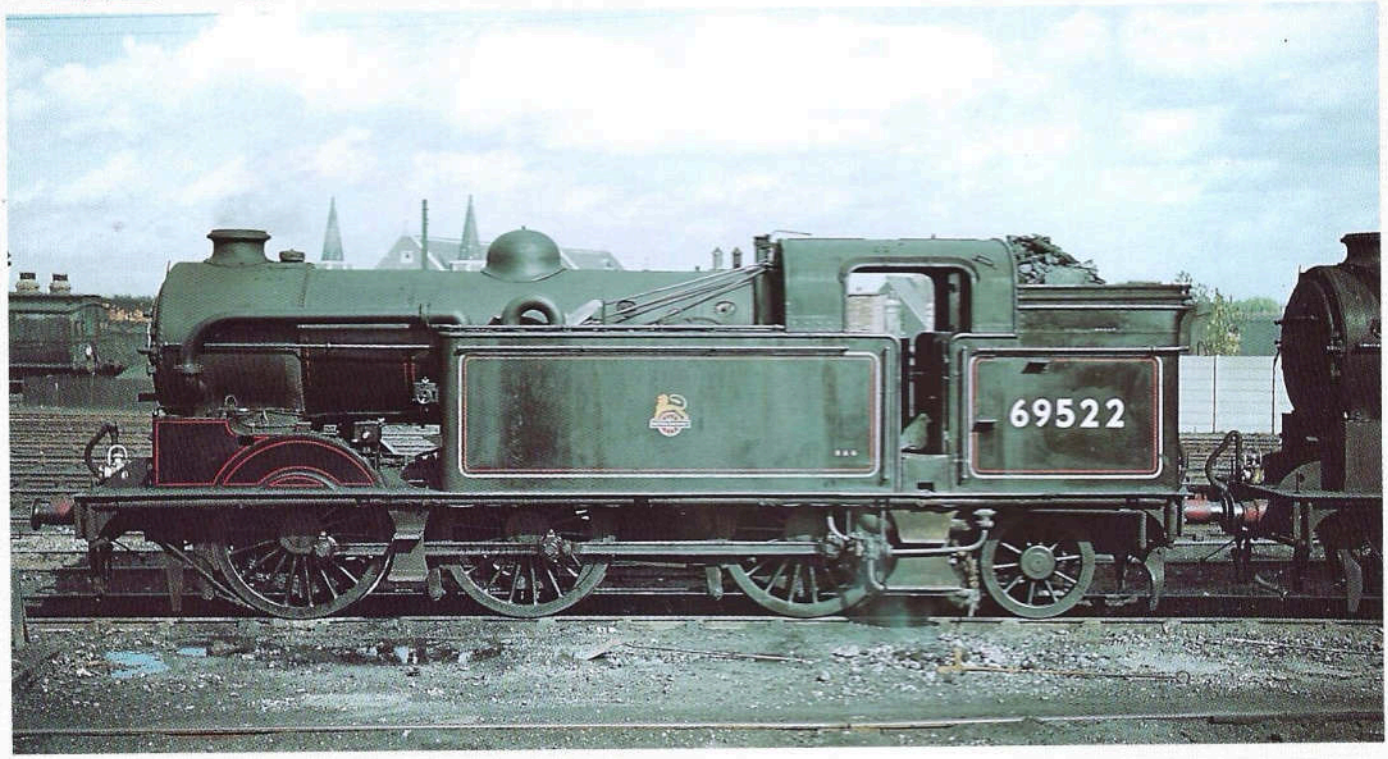
LEFT: Garter Blue on the Class A4 4-6-2s was one of the better schemes — enhanced both by the red lining at the front of the casing and the red wheels. The latter colour was more obvious when the side valancing was removed — a change welcomed by most observers. This is the famous 60007 *Sir Nigel Gresley* at the opening of the Rugby testing station in October 1948, carrying its final LNER livery but with new BR markings. Photo: J. M. Jarvis/Colour-Rail



GRESLEY
Great Northern
WORKHORSES

The Great Northern (and its LNER successor) were perhaps most celebrated for their high speed Gresley pacifics, but freight and high-density suburban workings were just as important and remained so well into the 1950s. Here, at Hornsey shed on 22nd September 1957, are seen two typical reminders of Gresley's less well-known but equally valuable contributions to his railway. Both designs are fundamentally GNR in pedigree, though many were built after the 1923 grouping.

The (slightly) older concept is Class J50/4 0-6-0T 68990 — a late-built (1937) example, with larger bunker, of a type whose origins went back to 1913. Extremely powerful shunting engines (BR Power Class 4F), the first GNR examples were designed for shunting and trip freight workings in the West Riding where they were known as 'Ardsley' tanks. By contrast, Class N2/2 0-6-2T 69522 represents a type introduced in 1925 as the post-group development of Gresley's original GNR 1920 suburban passenger design, itself derived from an earlier Ivatt type. Those in the London area were fitted with condensing apparatus to work through the tunnels down to Moorgate from the GNR main line. Photos: W. Potter

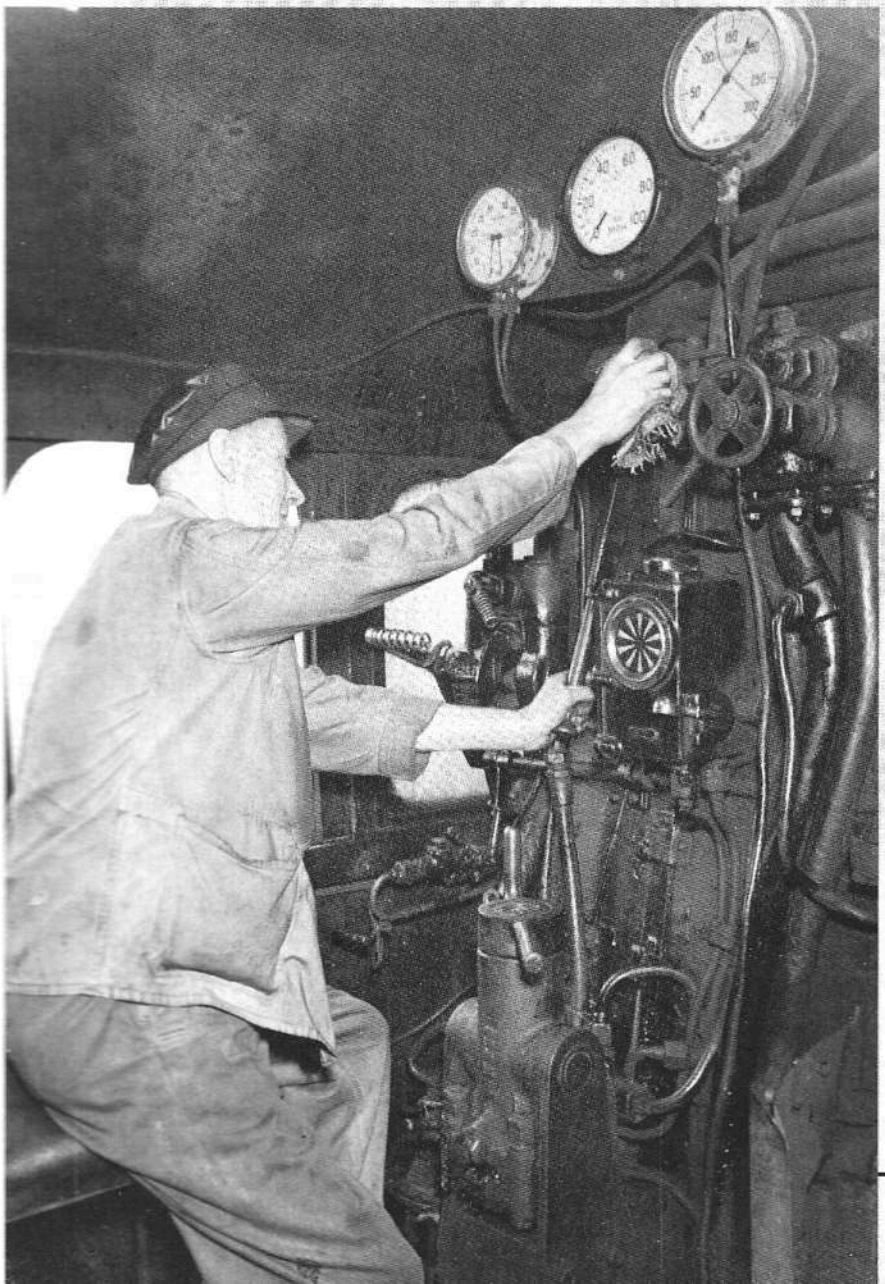


Firing the STEAM LOCOMOTIVE

A fireman's job on British steam railways was the intermediary step between cleaning and driving. It was in this position that a man gained footplate experience and prepared himself for the responsible job of engine driving. This is not to say that a fireman was not accountable for his actions, he was liable to be disciplined like anyone else.

by **CHARLES MEACHER**

Driver adjusting the blower valve of Class A4 60014 *Silver Link* **to maintain the draught on the fire at the required level in the absence of exhaust beats from the chimney.** Photo: H. G. Forsythe



But it was the driver who had the power to promote regularity and order on the footplate, providing he was not overcome by his mate's dominant character.

Not surprisingly, the confines of the engine cab could harbour hatred and hostility when two opposites were brought together. It was not unknown for these people to work as 'mates' for years without coversing socially. Some went to the extreme of drawing a chalk line on the floor thus indicating their respective places on the footplate. But there was a great deal more friendliness than bitterness in the enginemen's fraternity and many partnerships flourished.

A driver had to be willing and confident to accept as a mate a greenhorn who did not know one end of the shovel from the other, and even less about combustion and the art of raising steam. It helped if the novice was willing but such resolve was no substitute for steam. Firing instructors were appointed in some districts, though usually it was left to the driver to tutor the apprentice. It was only when a lad had a succession of 'cold runs' that a firing instructor travelled with him.

etween the two world wars many firemen served a long apprenticeship, up to twenty years in some cases. Promotion was practically non existent and during the 1930s, men were relegated to labouring work. Some supervisors, dedicated company men, deliberately deprived cleaners and firemen of higher grade duties thus prolonging the time in acquiring the necessary number of turns to qualify for enhanced payment. A man could be waiting for say, three turns at summer's end and the foreman would make sure he did not get them so that with demotion at the start of winter, the man had to wait about six months for a chance to increase his earnings.

Wages were pitifully low during this time, a reflection on the 'supply and demand' theme in economics when an abundance of labour could be cheaply bought. My pay as a cleaner on the LNER at Carlisle Canal shed was 24/-(£1.20p) a week and from this I had to pay trade union dues of 9d (4p) and lodgings in the region of £1. My parents subsidised my existence, but at least I had a job.

This, plus satisfaction, was my reward for choosing a railway career. Anyone interested could learn the basic facts about a steam locomotive while on the shed. A cleaner laddie was welcome to fill up the firebox of a Pacific or watch a boilersmith expand tubes or tighten stays. The men engaged on this work were eager to impart the knowledge gained during their lifetime and it was in the interest of the novice

to educate himself. This learning was also beneficial to the employer but realisation of this has only become apparent on the railway in recent times.

Basics of the Trade

It was usual for a young fireman to begin his footplate work on shunting engines where he could develop bad habits if not corrected. Youth has a great capacity for sleep and it was tempting to shovel on enough coal to last half a shift and sleep while the coal burned. This was definitely not good firemanship and could be very wasteful.

The average home had a coal fire in those days and it was common sense never to drown the fire with too much coal (or potato peelings, for that matter). If we smothered the red glowing embers we had to sit and shiver before a smouldering black heap pouring smoke up the chimney. The only reason why the steam engine survived heavy firing was because of the exhaust blast, the blower and a supply of steam for immediate requirements. It could be likened to fireless steam engines which replenished their supply of steam from a stationary boiler every two hours or so.

If, however, an engine with a 'dead' fire was called on to do some heavy work at short notice it would fail in the attempt. This was known as a 'green fire' and I recall the occasion when a northbound Pacific loco had to be taken off a train at Dalmeny through lack of steam — the firebox was full of unburnt coal.

When too much coal was shovelled at the one time the firebed increased in thickness so that sufficient primary air from below the bars could not get through to maintain the high temperature necessary for complete combustion of volatile gases. There was also a heavy discharge of black smoke, wasteful unburnt gases.

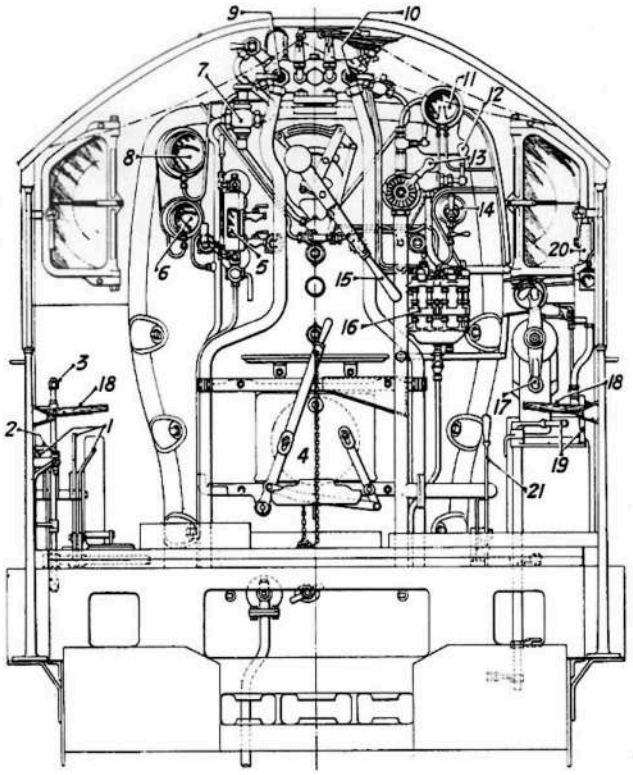
It was customary with wide fireboxes to fill up the 'back of the door' and have red embers elsewhere. In this way smoke was kept to a minimum. After a period of time the heavy fire would burn through and act as a nucleus of intense heat throughout the journey. One shovelful of coal thrown on to the red embers would change the grey haze at the chimney to something like an Indian's smoke signal.

At Edinburgh Waverley station during mid morning and late afternoon there used to be a parade of Pacifics waiting to haul trains to the north and west. Firemen were mindful of the locomotive inspector on his rounds and would ensure a minimum of pollution. The inspector visited each locomotive in turn checking on their readiness for the task allotted. After the inspection he retraced his steps to the office satisfied that all was in order. Just then the starting whistle would be heard and he would look back to see a big Pacific moving off under an atomic-like cloud. When he eventually reached his office he had to deal with numerous phone calls from shopkeepers in Princes Street complaining about black smoke.

Some firemen on these passenger jobs were more concerned about steam

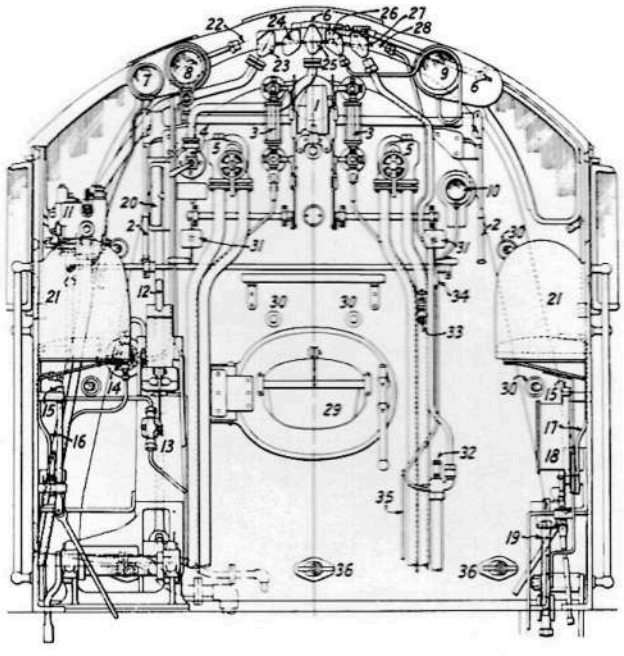
Footplate LAYOUTS

GWR King Class 4-6-0



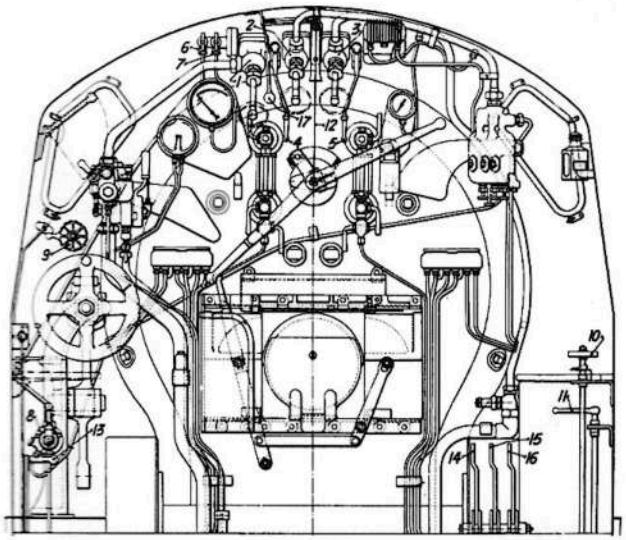
1. Damper controls
2. Coal-watering cock
3. Exhaust injector control
4. Firehole doors
5. Water gauge
6. Steam-heating pressure gauge
7. Steam-heating valve
8. Boiler steam-pressure gauge
9. Exhaust injector live steam valve
10. Right-hand injector live steam valve
11. Vacuum gauge
12. Ejector steam valve
13. Ejector air valve
14. Blower valve
15. Regulator handle
16. Lubricator
17. Reversing handle
18. Tip-up seat
19. Sanding-gear levers
20. Audible signalling apparatus
21. Cylinder cock lever

LNER A4 Class 4-6-2



1. Regulator stuffing-box
2. Regulator handles
3. Water gauges
4. Blower valve
5. Combined steam and delivery valves
6. Stop valve for steam stand
7. Duplex vacuum gauge
8. Steamchest pressure gauge
9. Boiler-pressure gauge
10. Carriage-heating pressure gauge
11. Vacuum ejector
12. Reversing screw handle
13. Reversing gear clutch lock
14. Steam sand valve
15. Water control for ejectors
16. Sand-gear lever
17. Cylinder cock lever
18. Speed recorder
19. Drop-gate screw
20. Cut-off indicator
21. Enginemen's seats
22. Steam sand supply valve
23. Ejector steam stop valve
24. Blank
25. Blower stop valve
26. Pressure gauge stop valve
27. Carriage-heating stop valve
28. Mechanical lubricator warming valve
29. Firebox door
30. Washout plugs
31. Remote control for water gauge cocks
32. Carriage-heating safety valve
33. Coal-watering cock
34. Whistle control
35. Damper rod
36. Handholes

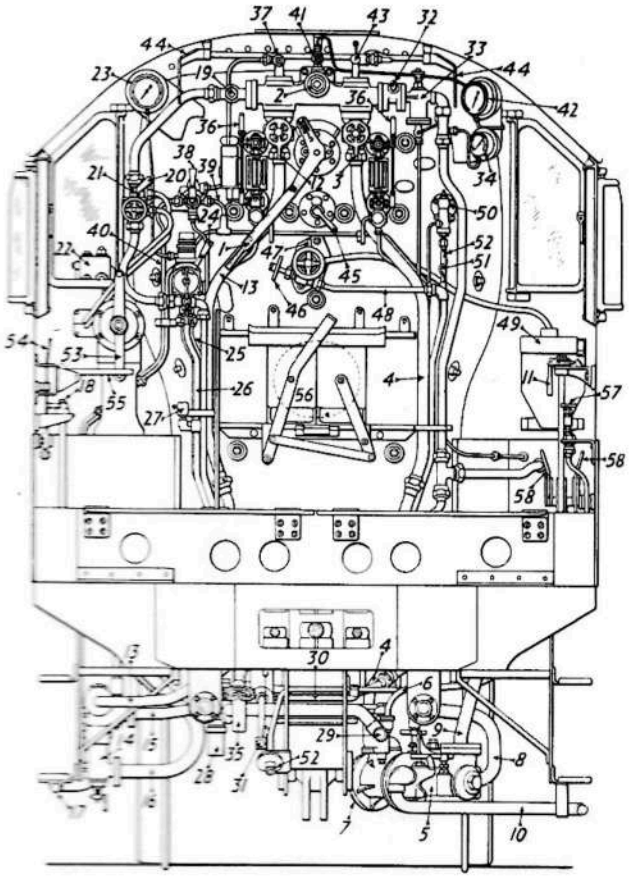
SR Schools Class 4-4-0



1. Vacuum ejector steam valve
2. Sight-feed lubricator steam valve
3. Train-heating steam valve
4. Live steam injector valve gear
5. Exhaust injector steam valve lever
6. Steam to clutch valve
7. Steam to pressure gauge
8. Reversing shaft clutch valve
9. Blower valve hand wheel
10. Water regulator, exhaust injector
11. Feed-cock spindle
12. Whistle wire
13. Cylinder drain cocks lever
14. Ashpan front damper lever
15. Sanding valves lever
16. Ashpan back damper lever
17. Whistle lever

LMS Class 5 4-6-0

1. Regulator handle
2. Main steam valve for steam supply stand
3. Live steam valve to exhaust steam ejector
4. Live steam pipe to injector
5. Exhaust steam injector
6. Auxilliary steam pipe from steamchest to injector
7. Exhaust steam pipe to injector
8. Water-feed pipe to injector
9. Delivery pipe from injector to boiler
10. Overflow pipe from injector
11. Water-control gear for injector
12. Steam valve to live steam injector
13. Live steam pipe to injector
14. Live steam injector
15. Water-feed pipe to injector
16. Delivery pipe from injector to boiler
17. Overflow pipe from injector
18. Water-control gear for injector
19. Stop valve to ejector steam valves.
20. Small ejector steam valve
21. Large ejector steam valve
22. Combined large and small ejector
23. Vacuum gauge
24. Driver's brake valve
25. Train pipe
26. Steam brake pipe
27. Steam brake cylinder lubricator
28. Drip valve for train pipe
29. Train pipe connection to tender
30. Steam pipe to engine brake cylinder
31. Steam brake pipe connection to tender
32. Stop valve to carriage-warming reducing valve
33. Carriage-warming reducing valve
34. Carriage-warming pressure gauge
35. Carriage-warming hose-pipe connection to tender
36. Water-gauge cocks
37. Stop valve to sanding valve
38. Steam sanding valve
39. Sand pipe to trailing wheels
40. Sand pipe to leading and driving wheels
41. Steam valve for boiler-pressure gauge
42. Boiler-pressure gauge
43. Whistle valve
44. Whistle handles
45. Blower valve
46. Steam valve for sand gun
47. Sand gun hand-operating wheel
48. Steam pipe from steamchest to sand gun
49. Sand hopper for sand gun
50. Continuous blow-down valve
51. Steam pipe from steamchest to blow down
52. Blow-down pipe to tender
53. Reversing screw handles
54. Cylinder drain cock handle
55. Driver's seat
56. Fire-hole door
57. Coal-watering cock
58. Ashpan handles



than Edinburgh's environment and it was their practice to push the heavy fire at the back of the door forward as soon as the wheels started to move. If they had waited a minute until the engine passed into the Mound tunnel the offensive smoke would have dissipated and mixed with exhaust steam, causing less disquiet amongst neighbours.

Any driver worthy of the name would have cracked down on these obnoxious practices but, too often it was left to the 'black smoke' inspector to reprimand and report the offenders to a higher authority. Actually, smoke detection was only one of many duties allocated to the locomotive inspector at Waverley but to all and sundry he was known as the 'black smoke' inspector.

Although complete combustion was the aim of every good fireman, it was also desirable that the right amount of steam was provided at the proper time. This is where good firing depended so much on good team work between the driver, fireman and timetable planner. Schedules were generally so arranged that the demand for steam remained fairly constant. This was done by allowing for lower speeds on rising gradients, a renowned feature of the now defunct Waverley Route. Although an engine used more steam per mile when climbing a bank, it used little if any extra steam per minute because it was moving more slowly. The rate of admission of steam to the cylinders was increased by the driver's adjustment of the reversing lever but the overall steam rate was no greater because the pistons were moving more slowly.

Though understandable, it was a mistake to think that much more coal was required in a given space of time when working heavy on rising gradients. As the fireman sat watching the steam pressure needle fluctuating backwards it was a big temptation to throw on more coal, or perhaps use the poker.

In normal circumstances there was no need to increase the rate of firing to any great extent and any attempt to produce 'poker steam' was ill-advised. This does not mean that there was no need to fire according to road conditions, as intelligent anticipation of the route and the driver's requirements could be a great aid to efficiency.

Fireboxes, Smokeboxes and Preparation

It was important to learn about the different firebox designs, whether they were wide or narrow, deep or shallow. A clean ashpan was essential for a free passage of primary air (i.e. the air coming through the fire from below) and firebars had to be free of clinker to allow the air to reach the burning coals and aid combustion.

The baffle plate or 'scoop' fitment in the mouth of the firebox also had an important part to play. This directed the secondary air (i.e. coming through the firedoor) downwards and below the brick arch which protected the tube ends from direct contact with the fire. Its design also gave some protection to the crew in the event of a 'blow-back'. In 1954 a missing scoop indirectly led to the death

Fireman hosing down *Silver Link's* **footplate to keep dust and grit to a minimum. the hose ('slaking pipe') is attached to the coal watering cock.** Photo: H. G. Forsythe

of two Perth men on engine 72005, *Clan MacGregor* at Gleneagles.

Another purpose of the brick arch was to maintain a high temperature for proper combustion of the volatile matter given off by the coal. It increased the length of the path the gases had to travel and caused them to be rapidly ignited. The brick arch received heat from flames and radiation from the firebed. Long after the fire had been drawn, when the engine was in shed for boiler washing or repairs, a look in the firebox would reveal a red glowing mass of hot brick—the brick arch slowly cooling.

Dampers were fitted to ashpans to control the flow of primary air and if properly used could save fuel and water. They could be adjusted to suit conditions or completely closed when the loco was stationary for a long period. The cutting off of primary air caused fire to lie dead, and when the damper was opened again life was restored.

An experience with the new V2 Class 2-6-2 *Green Arrow*, indicated the importance of knowing something about dampers. It was on trial in the York area and ran short of steam. Neither the crew nor the inspector could identify the trouble which turned out to be a shut damper. The design of the V2's front damper required the handle in the cab to be depressed before being raised to the open position. These men were obviously more accustomed to the single action type.

The place to look for trouble was on shed when the engine was being prepared for work. This was when the fire was to one side of the box and a clear view could be had of tubes, stays, brick arch, firebars and last, but most important, the fusible plug(s) set in the crown of the firebox. These were made of brass; some had a lead core which melted at a comparatively low temperature, and others had a brass button, secured by a lead filling.

If the water in the boiler dropped too low and uncovered the plugs, the lead melted and allowed steam to escape into the firebox, which acted as a warning to enginemen. If this serious situation occurred, both water injectors had to be put on immediately and steps taken to deaden or remove the fire. To 'drop a plug', as they used to say, was looked upon as a grave offence, in the same category as a signal passed at danger.

After checking the firebox for possible defects the fireman would then have a look at the ashpan and smokebox. The smokebox was the extension at the front end of the boiler barrel which, together with the blast pipe and chimney, formed the means of inducing the air required for combustion in to the firebox.

Apart from the chimney orifice it was (or should have been) airtight. Other fittings in the smokebox were: superheater (when fitted), main steam pipes, blower and vacuum ejector exhaust pipes. On some locomotives the regulator valve was situated in the superheater header in the smokebox.

The big door giving access to this dark and dirty cavern was usually

Fireman checking water gauges on 60014. Before moving off, he must satisfy himself that they work properly and that the water level is correct. Photo: H. G. Forsythe

secured by a dart at its centre which engaged with a slotted crossbar. There were two handles on the outside of the dart, the inner handle on a square was used to position the spade-like dart either horizontally or vertically. In the former position the spade end went through the slotted crossbar and was turned to the vertical position then tightened up against the crossbar by the outermost handle on a threaded portion of the long shafted dart. Some engines had a series of 'dogs' round the circumference of the smokebox door to achieve the same purpose.

After checking for steam blows and leaking tubes in the smokebox the fireman would use a hand brush on the smokebox rim and remove any cinders or ashes. Then he banged the baffle plate fitted inside the smokebox door, dislodging ashes that cascaded to the footplate. Sometimes he would smear the rim with oil, thereby improving the airtight joint between door and smokebox, but such niceties really belonged to a distant past. The pile of smokebox ashes on the footplate was then swept on to the ground, later to be barrowed away by a shed labourer.

In preparing the fire it was important to first make sure that the water level in the boiler was correct. There were test cocks fitted for this purpose and use of these ascertained whether or not the water level was showing false. This could happen when foreign matter caused an obstruction in the gauge column cocks, trapping water in the gauge glass quite unrelated to that in the boiler.

When cleaning the gauge column protector glasses the main steam cock (top) and water cock (bottom) had to be closed in the interests of safety. A burst gauge glass releasing high pressure steam in a confined place was not a pleasant prospect.

Had the steam pressure been low or non existent when the fireman first joined the engine, his priority would have been the fire. This was spread across the firebox in an even thickness using the long shovel or poker provided, with the blower turned on.

The wider spread of the burning coals exposed them to a greater volume of air with the result that there was soon a bed of red fire, fully alive and crying out to be fed. The initial black smoke caused by the prodding had disappeared from the chimney top and only light ash shot forth.

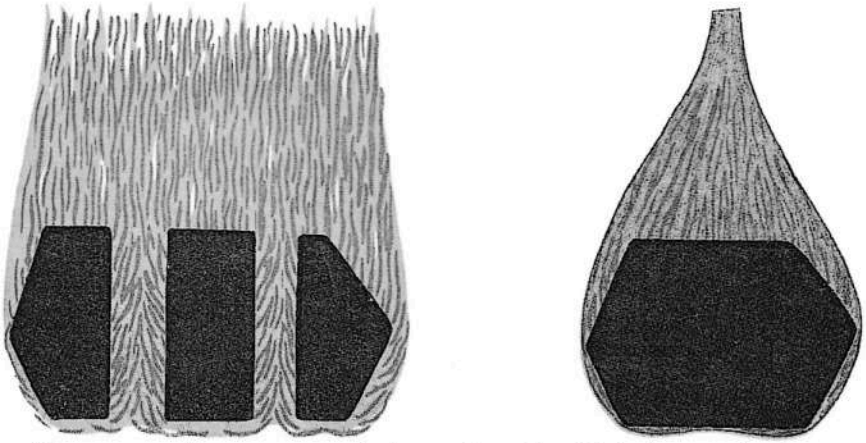
If the coal tended to be of a clinker-forming nature, then was the time to introduce fire-brick or limestone on the grate. When ash formed this prevented clinker from running over the firebars, restricting the air passage.

I recall the situation when a fireman sought revenge against a firedropper whose wrath he had sampled. On the way back to the shed one day he half filled the firebox with bottles and old jam jars. This created a clinker that a pneumatic drill would have shunned and for two hours or more the demented firedropper sweated and swore as his long shovels curled up against the lava in the firebox. But big steam engines used to devour all kinds of coal, good and bad, heat producing and camouflaged stone.

In the early 1950s when the Stone of Destiny was removed from Westminster Abbey there were jokes galore about this incident. A driver arriving on shed one day cried out to some colleauges "It's been found — the Stone of Destiny has been found!" "Where!?, Where is it!?" asked his mates. "It's awe broken up on the tender o' that engine — we've been struggling for steam awe day!" replied the driver as, exhausted, he limped over rails on his way home.

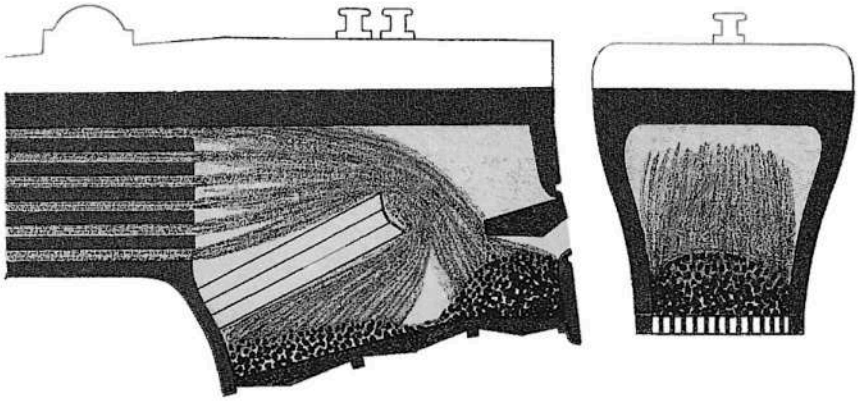
A fireman soon got to know the various types of coal and a look at the tender or bunker told him whether or not he was in for an easy shift. All kinds of rubbish was sent to St Margarets depot where freight engines dominated

Effect of Size of Coal



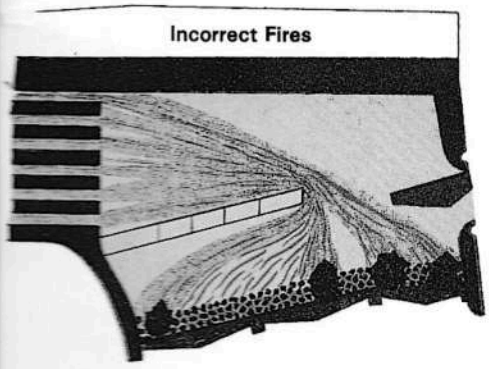
Many more surfaces are exposed when a piece of coal is broken: smaller pieces will cover a bigger area of the grate than a single lump and help to produce enough flame to fill the combustion space fully. Large coal should be broken down to about the size of a man's fist.

Incorrect Fires



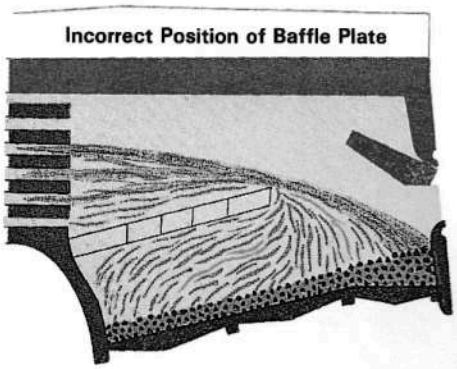
Firebed uneven; air unable to flow through thick patches under door and front of brick arch; too much air flowing through hollow patch and up to the sides of the firebox causing gaps in flames; combustion not completed in firebox; thick black smoke produced.

Incorrect Fires



Large lumps of coal cause dead spots in firebed, gaps in flame stream and uneven firebed surface.

Incorrect Position of Baffle Plate



Baffle plate tilted up allowing air to pass direct to upper part of tubeplate setting up strains, chilling nose of brick arch and laying foundations for dirty tubeplate and leaking tubes.

the scene, sometimes dross and egg briquettes. Haymarket passenger engines were supplied with superior coal, a special hopper being reserved for 'non-stop' engines.

Teamwork — or the lack of it

The quality of coal never seemed to be considered by some drivers, a young inexperienced fireman was more likely to be blamed for bad steaming and lost time. If the novice dared to work according to the text book he would be told to throw that on the fire to make steam. It was sometimes daunting to make a practical acquaintance with firing duties when a dour driver sat there criticising your every move. Many young men have surrendered to this arrogance, wrongly, in my opinion. The more resilient learner would face up to his tormentor and threaten to wrap the shovel around the driver's neck. This caused a kind of silent hostility between the two men but at least the firemen had peace to learn by trial and error.

There was an occasion when this sullen relationship flared into sudden temper and the driver shouted, "I'm asking for another fireman when I get back!"

"Thank God for that," said his mate, "I could do with a hand".

The steam locomotive firebox was like a large digestive system which worked well when fed nourishing food in the form of good quality coal at the right time and in the right quantity. It was not difficult to picture what was happening in the firebox even behind a closed door or barrier of flames.

If the fireman's imagination did not stretch that far he had only to cant his shovel at the mouth of the firebox and a current of air would clear a passage through the flames and allow him a clear view of the firebed. He would see any parts he had neglected and places that had been overfed. He might also see tubes and stays 'running like a burn' and realise why the boiler had been heavy on water.

To the beginner, firing seemed an art that could never be acquired. Even on the shed, when all was still, there was more chance of him hitting the fire door with the shovel than directing the coal expertly to the fire. On an engine travelling at speed the exercise seemed impossible. One had literally to get into the swing of things and allow the body to sway with the incessant roll of the locomotive. The feet were, of course, reasonably stable on the cab floor although exposed to a slight 'shuttle' movement. Most of the oscillation was confined to the tender where the coal was collected on the shovel. On a side-tank engine the cab floor and bunker bottom were as one and firing was much easier. The fireman was expected to face the driver when firing and since most engines were left hand drive this called for left hand firing, another handicap for the majority of men who were naturally dexter. But, practise makes perfect, or at least develops skill, and before long the young coal heaver became part of the rhythm of the bounding locomotive.

As a team the driver and fireman worked with and for each other. Intelligent use of the reverser allowed a quicker cut-off as the steam fed to the cylinders. This meant the elastic quality of the steam was used more expansively to drive the pistons thus economising in the demand for the power the fireman laboured to produce.

Some drivers just opened wide the regulator and stuck their head out of the window caring not at all for the fireman struggling behind him. Then the maestro would blame his hapless mate for loss of time in running. At the other extreme there were drivers who behaved more like technicians. These scientific blokes dealt in half notches when controlling the steam at the fore-end. For them it was not sufficient that the quadrant had markings to guide a driver as to the economical use of steam, the 'egg heads' tried to set the distributing valves more finely.

All the pride and expertise of a former age was lost in the post war years when the steam engine went into decline — faster at Edinburgh (St Margarets) than at some other depots. Men did their best with inferior coal and run-down locos. In 1947 preparations were made to convert engines to oil burning, so serious was the coal shortage. This emergency soon became a part of history but there was still twenty years of hard slogging ahead, two decades of muscle work.

Fully open regulator; and *Silver Link's* driver checks the steam pressure gauge as the engine gets under way. Photo: H. G. Forsythe

Firing the Steam Railcars

Such strenuous effort was uncalled for on the unconventional steam coach, otherwise known as 'sentinel car' or 'camel car' — see article, page 106. This was a wee bit like the current diesel railcar in as much as the passenger carrying compartment was part of the powerhouse. Here the similarity ends, the camel car was not self motivated, it had to be nursed.

The LNER had a fleet of these steam coaches working on branch lines and trying to compete with the more flexible road buses. They had a nice appearance with pale green lower parts

Fireman 'lifting the firedoor flap' to examine the state of 60014's fire. The glowing coal can just be seen to the left of the shovel. Photo: H. G. Forsythe

and cream coloured superstructure and were named after stage coaches whose history was posted inside the vehicle.

The one I fired was called *Quicksilver*, namesake of a stage coach that served the Berwick area. There were driving controls at both ends but the fireman was confined to the compartment that housed a vertical boiler. This boiler was fed by a small conventional injector but in addition there was a water pump which derived movement from the carriage wheels when in motion.

The firegrate was round like the boiler and held in place by a securing chain. Release of this chain allowed the fire to be dropped in its entirety. Special coal was reserved for the steam coach and was emptied from bags through a hatch in the roof into a bunker.

Quicksilver could never be left unattended like the conventional steam engine.

Water in the gauge glass disappeared quickly and the small fire dimmed with equal haste. The fire itself had to be built cone-shaped and small amounts of coal were dropped through an internal pipe on to this pyre. The tool for this was a small shovel like the kind used in fish and chip shops when cooking ranges were coal fired. Three shovelfuls of coal at a time was the recommended amount for the steam coach. If this quantity was exceeded the cone-shaped fire was likely to collapse resulting in a loss of steam.

Getting the water scoop out against the force of water from the track troughs was always a tougher job for the fireman than lowering it in the first place. Photo: H. G. Forsythe

The North Leith branch line was one of the routes served by *Quicksilver* out of Waverley station. The outward trip was easy going on a falling gradient to near sea level when I sat with the driver in the leading cab-cum-boiler-house. On the rising gradient back to Waverley, however, I was alone with my boiler in the rear; just as well, too. By the time we passed through the Calton tunnel struggling to reach level ground at the station I was on my tip-toes looking for water in the gauge glass. This bobbed up and down more like a shadow than the real thing but I dare not put on the injector when my mate needed all the steam available to reach Waverley. He would have had a fit had he known the true position.

Strange to say the camel car steamed better when, on occasions, a fish van was attached at North Leith!

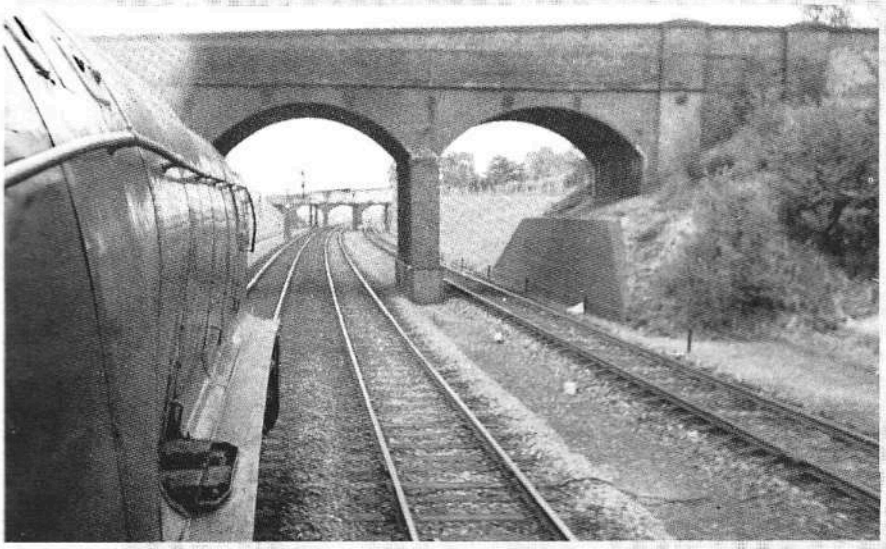
Apart from requiring constant care *Quicksilver* and her kind were notorious for black smoke. This was difficult to avoid when raising steam, although the pollution ceased instantly when the lid was removed from the top of the internal feed pipe.

While preparing for a noon departure from Waverley one day there was more smoke than enough and I saw the loco inspector hurrying towards No.2 platform and the camel car. At this I immediately lifted the fire lid and sat back appearing quite unconcerned. When the inspector arrived he looked at me and simply said, "That's better."

We booked on at 4.30 am for duty with the camel car and used paraffin-soaked waste to light the fire, or proper firelighters when available. This was also the practice at St Margaret's many sub-stations on a Monday morning; a cleaner laddie tended the engine fires at other times. In the main depot there was a furnace for drying sand and this was used for kindling purposes, too.

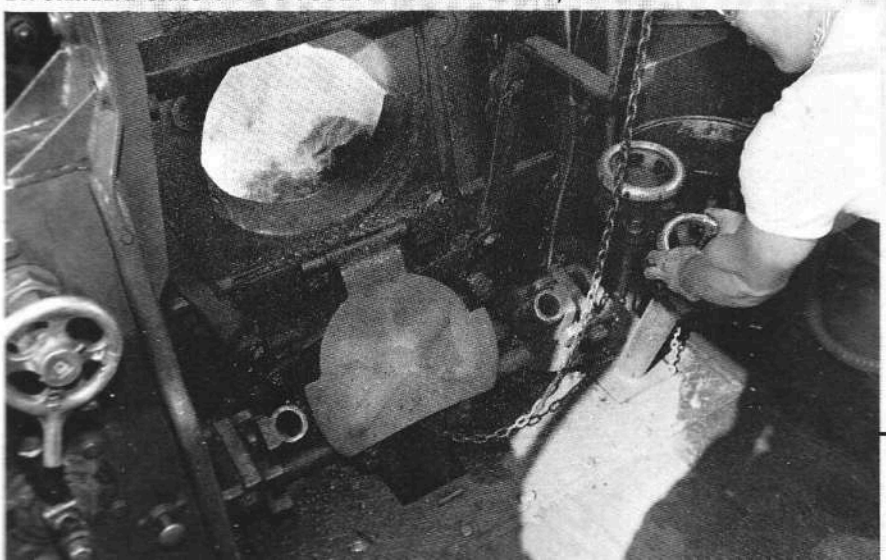
Steam raisers were usually ex-footplatemen relegated for health reasons, but the reek they created on a Sunday night when scores of engines were kindled simultaneously did not do their health any good.

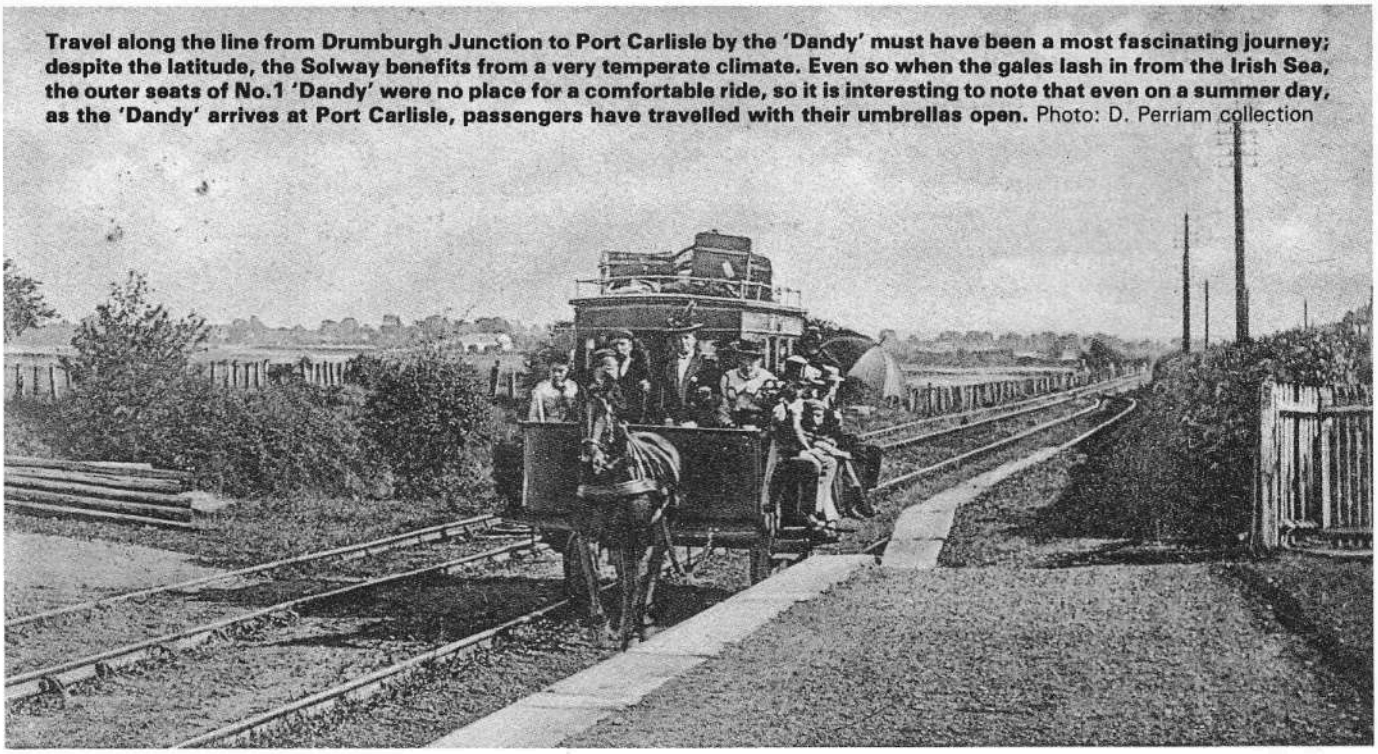
Still, a trainee fireman could learn a lot from these steam raisers and this was one way of introducing him to the rudiments of firing the steam locomotive. There is nothing to compare with the work nowadays apart from the efforts of preservation people. Even these stalwarts don't have to face up to a dirty big freight engine that has 'taken the pet' at 3 o'clock on a winter's morning, with coal that is incombustible and a driver as dismal as the dead ash in the firebox!



The fireman's view from the cab of *Silver Link* — when his other duties gave him a chance to enjoy it, of course! Photo: H. G. Forsythe

Fireman adjusting the firebox damper control wheels on the footplate of BR standard Class 4 4-6-0 75027. Photo: H. G. Forsythe





Travel along the line from Drumburgh Junction to Port Carlisle by the 'Dandy' must have been a most fascinating journey; despite the latitude, the Solway benefits from a very temperate climate. Even so when the gales lash in from the Irish Sea, the outer seats of No.1 'Dandy' were no place for a comfortable ride, so it is interesting to note that even on a summer day, as the 'Dandy' arrives at Port Carlisle, passengers have travelled with their umbrellas open. Photo: D. Perriam collection

The Port Carlisle Branch

by Alan Earnshaw

The railways of the north western corner of England are rarely featured in the prominent pages of the railway press, which is why it was particularly encouraging to see the article by A. J. Mullay on 'The Solway Viaduct' in the summer issue of 'Backtrack' last year. Whilst this primarily dealt with the Scottish side of the Solway, it did touch on the English connections in passing. To the south lay the intensive system of the Maryport & Carlisle Railway, but sandwiched between that railway and the Solway shore ran the thin arm of the North British Railway's attempt to reach the English west coast. This arm also had a short finger, a branch to the harbour at Port Carlisle, which had previously been served by a navigable waterway.

It was a relatively obscure little line which was originally promoted to run from the City of Carlisle to a small port on the Solway Firth, and unique in the fact that it was soon by-passed and eventually resorted to horse-operation. In the early days of the railways it was not uncommon to see horses handling both passenger and freight services. The origins of these horse-drawn vehicles, or 'Dandys' can easily be traced to the earlier forms of transport employed on the wagonways; as locomotives improved, they were soon phased out and replaced. Yet at Port Carlisle this strange service lasted many years and a relic of the branch is found in the North British Railway 'Dandy' of 1861 which is preserved in the National Railway Museum at York. The 'Dandy' at York was rescued by the LNER in 1925 to take part in the 1825-1925 celebrations, eventually being fully restored in 1926. Before its rescue it had spent several years in use as a pavilion at the Port Carlisle Bowling Club, but it is not commonly known that there were plans to rescue a second 'Dandy' from the nearby tennis club. Unfortunately plans for that coach (built in 1908) failed to materialise due to the poor condition of the body.

These two 'Dandy' coaches were the final members of a series of five which operated along the branch to a small harbour from where steamers operated services to Liverpool, Ireland, Scotland and even America. Though the branch line was closed in 1932, the port it served had an even shorter existence (1823-1862), but both have a fascinating history that is relatively unknown outside Cumbria.

When the old canal to Carlisle was converted into the railway, the canal basin was also drained and the lock gates removed. As the new port of Silloth grew in the latter part of the 19th Century, Port Carlisle's days as a harbour were coming to an end. By the turn of the century, the port was totally eclipsed by the new facilities in Silloth Bay, and Port Carlisle became a rural backwater. The old dock-side warehouses were converted into cottages, or stables and used in connection with the replacement railway service. Photo: D. Perriam Collection

From Canal To Railway

Like several railway schemes of the 1830s, the line was proposed to replace an earlier canal, which was unable to compete with the coming railway age. However, it must be rather unique in that it replaced not just a standard canal, but a ship canal along which sea-going vessels passed. The seaward terminal point of the canal was located on the English side of the Solway Firth, a large inlet from the Irish Sea separating England and Scotland. Strangely, and despite its vast size, both

the Solway Firth and its railways are relatively unknown, even though it is an extremely beautiful area.

For centuries travellers crossed over the Solway by secret fords or paths, some over a mile long. These crossings or fords were dependent on a variety of factors, including local guides, favourable tide conditions and, quite often, whether or not you were being pursued. Indeed the crossings were not the safest of places and throughout history there are records of men and animals being caught by advancing tides. For example in 1216 over 2,000 retreating Scots raiders were drowned trying to escape over one of the fords. These fords were to continue in daily use until the 19th Century, but were eventually replaced by steamers plying over the Solway from Port Carlisle.

The need for a canal rose early in the 18th Century, when the fashion for navigable waterways was in vogue. Before 1720 there had been quite a thriving coastal trade with colliers sailing round the coast from Maryport and up the Solway almost to Carlisle, but in that year the government introduced Coast-wise charges, a form of coastal shipping taxation. To relieve the need this caused in Carlisle, three men, Thomas Pattinson, John Hicks and Henry Orme sought a Bill to waive coast-wise duties between West Cumbria and Carlisle. They also intended to dredge the River Eden and build wharves, warehouses and cranes, presumably close to the city centre. The Bill was passed but the economic climate was unfavourable for such an adventurous scheme. Improvements were then put in hand to the wharf at Sandsfield so that vessels of up to 60 tons could sail to within five miles of Carlisle.

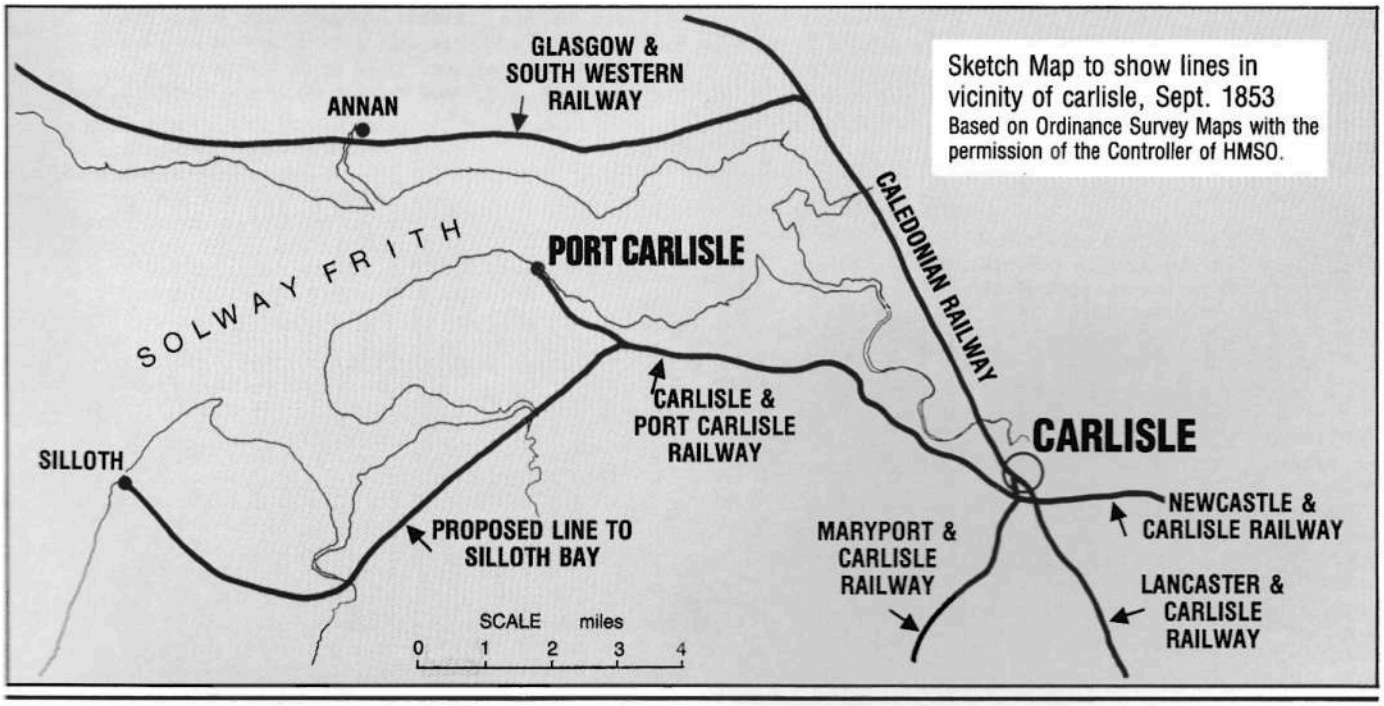
In the following decades there came talk of a great canal to link the Tyne to the Solway and thus make a short cut overland for small coastal vessels, but the Carlisle men were never enthusiastic about these proposals. By this time there was a good trade developing between Sandsfield and Liverpool, with

Despite the loss of the port, the railway company did endeavour to provide a few facilities to encourage a tourist trade: a small promenade and pleasure gardens were opened between the sea front and the goods yard, and in the summer months these were very popular with visitors who would ride down from Carlisle. Here, around the turn of the century, trippers enjoy basking on the grassy banks that line the muddy beaches forming the shores of the Solway.
Photo: D. Perriam collection

Liverpool 'flats' or canal boats coming right up the coast from the Mersey. By 1807 there was growing demand for a canal to link the city to the sea and proposals were made to run the canal from Maryport. Unfortunately the engineers decided against this and the canal was built from Fisher's Cross, later re-named Port Carlisle, where there was a lock at the entrance to the harbour, followed by a small basin, after which it ran for 11¼ miles into the city.

On the whole route there were no over-bridges, and crossings were made by two-leaved draw bridges like those on the Forth & Clyde Canal, thus allowing tall masted ships to sail right into the heart of the city. The canal opened on March 12th 1823 and lasted only until August 3rd 1853, just over 30 years, but during this period it carried an amazing variety of traffic. Cotton from Liverpool was an important commodity carried along the canal, as by this time the city had over 6,000 people involved in spinning and weaving. In the reverse direction went large quantities of miscellaneous traffic including, in 1830, one of Stephenson's locomotives bound for the Liverpool & Manchester Railway.

In August 1833 the Carlisle & Annan Steam Navigation Co began operating a service from Port Carlisle to Liverpool, but it also called at Annan each way providing a useful cross-channel ferry service. This foreshadowed the establishment of a regular ferry service which commenced in 1839, following the construction of a jetty at Annan in 1838. The other major factor in the development of the port were the emigrants from Germany and Europe who travelled across land on the Newcastle & Carlisle Railway which opened in 1837/8. In anticipation of this line opening, the railway company had laid in a 1½ mile line to Carlisle canal dock basin in 1836 from London Road Station. This line opened on March 9th


Sketch Map to show lines in vicinity of carlisle, Sept. 1853
Based on Ordinance Survey Maps with the permission of the Controller of HMSO.
GLASGOW & SOUTH WESTERN RAILWAY
ANNAN
SOLWAY FRITH
PORT CARLISLE
CALEDONIAN RAILWAY
CARLISLE & PORT CARLISLE RAILWAY
CARLISLE
SILLOTH
PROPOSED LINE TO SILLOTH BAY
NEWCASTLE & CARLISLE RAILWAY
MARYPORT & CARLISLE RAILWAY
LANCASTER & CARLISLE RAILWAY
SCALE miles
0 1 2 3 4

At first a NBR 4-wheeled coach was used at Port Carlisle, but it was found that it was too heavy for the horse so the first 'Dandy' was built by Barton & Tweddle; it too had a relatively short life and was replaced by this vehicle around 1861. At first the 'Dandys' ran through from Carlisle Canal Station, attached to steam trains bound to or from Silloth, but they later worked only between Drumburgh Junction and the terminus. Photo: NRM collection

1837 when the first locomotive *HERCULES* drew 20 coal wagons to be loaded into the *Eden* bound for Glasgow. Other trains on the line that day were hauled by *GOLIATH* and *ATLAS*, which trains also assisted loading the *Eden* as well as the *Swan* bound for Glasgow. Between 1837 and 1859 thousands of German and Polish emigrants passed through Carlisle to the Solway ports; in 1839 alone, over 1,000 Germans passed through the canal on their way to America. However these early railway developments, which promised so much traffic, were threatening both the port and the ship canal.

A major threat to the cross-channel ferries came from the Glasgow & South Western Railway which was promoting a route along the northern edge of the Solway to connect Dumfries and Galloway to Carlisle (1846-8). By 1847 the Annan steamer service had ended and within three years the Liverpool passenger service was withdrawn when cheaper fares were introduced from Whitehaven to the Mersey ports. The railways with their quicker route to the sea meant an end for the prosperity of the inland ports, and accelerated the eventual closure of the canal. The strongest challenge had come with the Maryport & Carlisle Railway which opened in 1845, connecting with the Newcastle & Carlisle in the centre of Carlisle, and opening up a much shorter route from the North East to the Irish Sea. Despite the canal company paying for two Trinity House pilots at Maryport to bring boats round to Port Carlisle, the development of Maryport dramatically reduced the numbers of boats prepared to sail up the treacherous Solway Firth.

The demise of the Carlisle Canal came with the advent of the railways and it was perhaps fitting that the canal itself should become a railway, presumably in the vain hope of keeping the port alive. Plans to convert the canal were quickly drawn up, and following the closure of the canal in August 1853, a horse-drawn omnibus conveyed passengers to meet the few remaining steamers venturing up the Solway.

The track was built on top of the canal, and work progressed swiftly, opening on May 22nd 1854. The line followed the twisting route of the canal, and only one sharp curve at Kirkandrews was smoothed out. This left the line with a legacy of hard riding and a permanent speed limit of 25 mph between Canal Junction and Dykesfield. Surprisingly when the line opened on June 22nd 1854 there were none of the usual celebrations associated with the opening of a new line. Even the local

The fourth horse-drawn vehicle to serve Port Carlisle was 'The New Dandy', a converted NBR 4-wheeled coach without draw-gear and buffers. It was numbered 24 by the NBR and placed in their locomotive-hauled series providing passengers with two 3rd class and one 1st class compartment. It was never intended as the main service vehicle and was kept at Port Carlisle as a stand-by, mainly for use at peak times. It lasted until 1907 when it was sent to Cowlairs Works for a routine check, but found to be in so poor a condition that it was scrapped on site. Photo: NRM collection

paper merely stated "Carlisle & Port Carlisle Railway — This line was opened for the conveyance of passengers yesterday." Only a few spectators turned out, and the first train conveyed no more than twelve passengers. The reasons for this lack of interest lay in the fact that the company had already turned its attention from Port Carlisle and had designs on the construction of a new deep water port with a wet dock at Silloth.

The journey times to Port Carlisle took 35 minutes and the return fares varied from 1s 5d (7p) — 3rd class — to 2s 9d (14p) — 1st class. The facilities at the terminus were quite extensive by comparison with Glasson where there was just a small shed on the platform. The railway, viewed as the port's salvation, came too late as the problems grew worse and shipping traffic threatened to slip away from the Solway altogether. Boats found it easier to use the coastal ports at Whitehaven, Workington and Maryport, which by then were all connected to Carlisle by rail. The shallow waters of the estuary and the constantly shifting sands gradually moved the deep water channel away from the dock, so that it could only be effectively accessible for two hours every tide, and was completely dry at low-water.

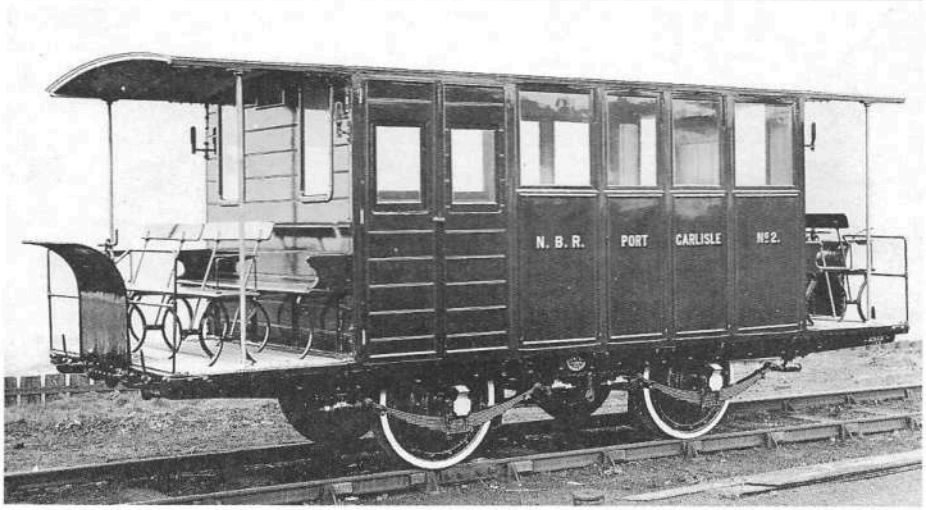
Accordingly, the decision had to be made to abandon Port Carlisle, and aim for a new point on the Solway Coast, where deep water port facilities could be built. To reach this planned port a railway line was promoted to Silloth, by a newly formed company The Carlisle & Silloth Bay Railway and Dock Company. This involved a 12¾ mile line from Drumburgh (8½ miles from Carlisle) to Silloth. The first sod was cut at Drumburgh on August 31st 1855, and the engine *SOLWAY* brought 16 overloaded carriages of spectators from Carlisle to witness the event. The 'new line' eventually opened in 1856, after which the Port Carlisle branch became a minor line with junction facilities provided at Drumburgh. The line to the purpose built town of Silloth eventually became a great success, though there was much trickery and chicanery in its development. Construction of a dock and a seaside resort where previously there had been little more than a rabbit warren ultimately led to a Parliamentary enquiry, as the construction of a town had absolutely no Parliamentary authorisation. Not only did it lead the railway company into a probing enquiry, it also led to their financial ruin within six years of their incorporation. Their only salvation was to look to outside sources for financial help, and on June 30th 1859 the stock was sold to the North British Railway on a lease back arrangement, six weeks later the new Silloth docks opened.

The NBR Moves In

The involvement of the NBR which was seeking an unrestricted outlet to Liverpool and Ireland led it into leasing both lines for 999 years which would terminate without notice on July 31st 2861. This new acquisition proved of immense value to its new owners, who were now able to by-pass Carlisle, where they had suffered frustrating delays at the hand of the Caledonian and London & North Western railways. From July 1st 1864 trains for Silloth and Port Carlisle were transferred from Canal Station in Caldewgate to Citadel Station, despite the very high tolls levied by the Caledonian for use of its 'metals' in to the station. Now the passengers were saved the long trudge between the two stations, the traffic on the Silloth line developed quite substantially. Regretfully the Port Carlisle line was not of much value to its new owners as it could not be developed as a seaside resort, and the port was now all but finished; but like the Silloth line it was eventually amalgamated into the NBR on August 1st 1880, and of course passed into the hands of the LNER in the 1923 grouping.

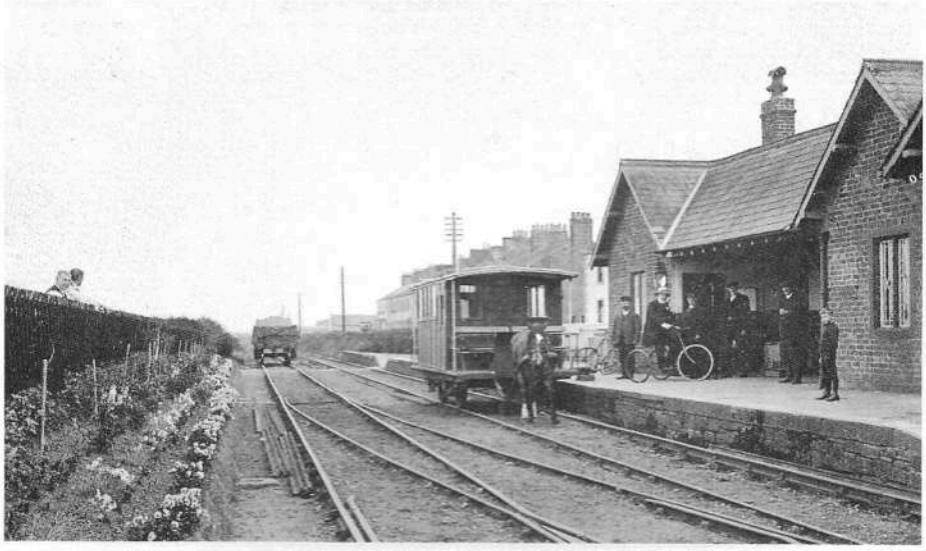
In the end the railways of West Cumberland effectively brought about the demise of the ports of Annan and Port Carlisle when the long low viaduct was built over the Solway between Bowness and Annan in 1868. This line, which was operated by the Caledonian Railway to provide a direct route between the Cumberland haematite ore-field and the steel works of Lanarkshire, could have re-vitalised the Port Carlisle branch had the twice proposed connecting spurs been laid in. However, this failed to happen, partially due to inter-company rivalry and partly due to the appalling state of the Port Carlisle branch, which by that time was being operated by horses.

With the relegation of the Port Carlisle branch into a secondary back-water, steam passenger trains were withdrawn from the line when the Silloth route opened and the branch trains were replaced by the 'Dandy'. This reversion to an antiquated working practice was approved in the committee's minutes of August 14th 1857, which resolved that "a horse be purchased for working the passenger carriage at Port Carlisle and shunting



When the plan to augment the 'Dandy' service with one-coach steam trains was pronounced illegal by the Board of Trade in 1908, the line was forced to depend on the service of No.1 alone. Consequently the NBR was forced to construct a further horse-drawn coach. It did this to the 'toast-rack pattern', with total accommodation for 62 passengers. It was originally supplied as open-sided vehicle, but the roller blinds offered little protection from the Solway weather, so it was re-designed as a semi-closed vehicle in 1912, in which guise it is pictured above. Photo: NRM collection

When No.2 was first sent to Port Carlisle by the NBR, it was supplied as an open sided vehicle — see above. This view of the coach at Port Carlisle was taken shortly after the final conversion. Photo: D. Perriam collection.



When the 'Dandy' services were withdrawn, it was the end of a golden era: the world was just a few short months away from a global conflict after which things would never be the same again. The demise of the 'one horse railway' on April 4th 1914 was viewed with much regret and it attracted a considerable degree of attention with the last 'train' being photographed from every angle. Photo: D. Perriam collection

wagons". Within six months the district superintendent reported to the committee that "the engines had been saved running 1,887 miles during the 3 month period ending 4th April in the consequence of running the passengers between Drumburgh and Port Carlisle by horse instead of engine". The goods services were worked by steam train until 1898, but by then the track was in such bad repair that locomotives could not be accommodated, and the regular freight service ended. Special freights were still handled, but like passenger trains they too were hauled by horses.

The Age of the 'Dandys'

The first 'Dandy' was built by Barton's of Carlisle, a firm of stagecoach builders, but it had a relatively short life, being replaced by a second 'Dandy' in 1861. At first the 'Dandy' ran from Carlisle Canal Station, and was attached to steam trains bound for Silloth; at Drumburgh Junction it was detached, and taken on to Port Carlisle by horse. The replacement 'Dandy' was built by the North British Railway and its St. Margaret's Workshops in 1861, but the date it actually entered service is not known. This vehicle is the one now preserved at the NRM and was out-shopped from the works in the period ending July 31st 1861. It was provided with a single door on each side, labelled "For the use of 1st and 2nd Class Passengers Only", and could accommodate 12 passengers internally. For third class passengers, a series of bench seats were bolted to the sides of the vehicle. On these eighteen people could sit, with their backs to the bodywork and their feet resting on a folding low-level footstep. On the roof a single luggage rail was provided, and the sides of the 'Dandy' were inscribed: 'PORT CARLISLE NBR No.1'.

A third vehicle 'The New Dandy' was converted from an old NBR carriage without draw-gear and buffers, providing two 3rd class and one 1st class compartments. It was numbered by the NBR as 24 in the locomotive-hauled series and kept at Port Carlisle, being used as a second carriage at peak times, like Market-days, Saturdays and holidays. In 1907 the third vehicle was sent to Cowlairs Works for a routine check, but as it was in a poor condition it was scrapped on site. The Locomotive Engineer, Mr. Reid, suggested that a redundant street tramcar would be applicable as these were becoming widely available in Edinburgh following modernisation of the city's tram service. However it was decided that it was too heavy for one horse, and the economies of the branch were too constrained for the acquisition of another.

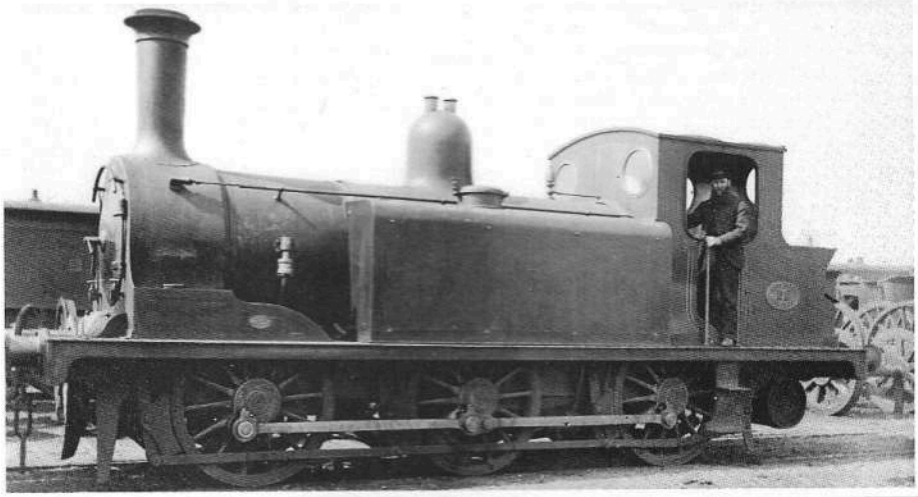
A second vehicle was sorely needed for the line, and a plan for a new 8 ton 'Dandy' was drawn up in 1908; work was ready to commence when it was realised that one horse could only pull 7 tons, so like the tramcar scheme it was also abandoned. Eventually accommodation on the line was so short, that passengers were only allowed to book to Drumburgh if they accepted the clause which stated: "The accommodation of the Port Carlisle carriage is limited and passengers will only be allowed to book through to Port Carlisle on the understanding that they will wait for the carriage to make a second trip if necessary, otherwise they can only book to Drumburgh".

Even so the operation was unsatisfactory, and it was decided to augment the 'Dandy' with steam hauled trains at peak periods, using a light engine with three coaches, one of which was a brake-third. The trial service began on June 11th 1908, with a maximum speed limit of 6 mph. Unfortunately the operating department of the NBR had not realised that they had failed to have the line sanctioned by the Board of Trade for locomotive-hauled trains as was required under the 1889 Regulation of the Railways Act. Due to the track being formed from a variety of track lengths, and differing rail weights, along with other signalling deficiencies the service was very quickly withdrawn.

Obviously, these things were not acceptable to travellers in the 20th Century, and a fourth 'Dandy' was constructed to the 'toast-rack pattern', but was very basic as its estimated cost of £125 shows. The 62 seat vehicle arrived in Carlisle on October 23rd 1908, and entered service the following day. Unfortunately the autumn weather along the Solway is not a suitable time to experiment with an open vehicle! Fitting roller blinds did not provide much protection from the penetrating winds whistling up the estuary and winter journies were intolerable. Accordingly it was re-designed as a closed vehicle, with 48 internal seats (an overall reduction of 14 seats) and a protective front valance in case the 'locomotive' got too frisky! This new vehicle became known as No.2 after which No.1 was returned to Cowlairs Works on an open carriage truck for breaking up. Fortunately the problems experienced in 1908 had made the NBR more cautious about finding a replacement and whilst the company looked at the future of operating steam railcars on the branch it was put in store.

A plan was drawn up for a separate platform at Drumburgh and two types of railcar were designed, but the need for signalling and track improvements

When the NBR decided to re-introduce steam trains, it transferred Class R 0-6-0T 22 from the Langholm branch, in readiness for the commencement of the service on Monday April 6th 1914. It has long been thought that the locomotive was converted at Cowlairs prior to transfer, but recently, doubts have been expressed. One school suggests that it was first sent to St. Margaret's works; others believe the conversion to have been done at Carlisle Canal Shed. Photo: D. Perriam Collection



When the 'one horse' railway converted to steam operation on April 14th 1914, it was an event of great celebration at Port Carlisle. The first train ran out to the terminus as ECS and is seen here prior to the departure of the "first" steam train. Now fully converted, No.22 is resplendent in its NBR livery and the 'Scottish' lion emblazed on a smokebox shield. The two coach train was barely adequate for the numbers wishing to travel and as extra coaches were not available the train made additional journeys throughout the day. Photo: Courtesy Carlisle City Library

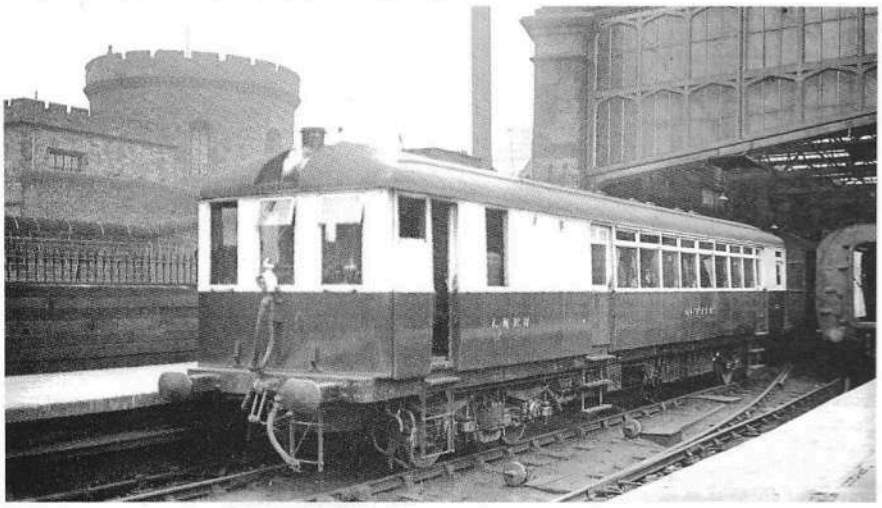
were presumably too costly for the NBR. Accordingly No.1 was repaired and returned to the branch. But within two years the NBR had decided enough was enough, particularly in view of some of the derogatory press comments about its horse-drawn services. Drumburgh station layout was altered and by 1912 the second platform was in operation, after which the 'Dandys' used the station without having to cross the Silloth line. Heavier rails were laid along the 2½ mile branch, and signalling improved. The days of the 'Dandy' were now numbered, and on Saturday April 4th 1914 the last horse-drawn train ran to Port Carlisle.

The Final Years

The last day of 'horse' operation was viewed with much regret both by locals, and in the railway press of the time as another era of railway practice quietly slipped into history. On Monday April 6th 1914 the first steam engine, a Class R No.22 transferred from the Langholm branch, pulled into the terminus. Much celebration accompanied the occasion, followed by a luncheon at the Hope and Anchor Inn directly opposite the station. Driver Isaac Hickson who had driven the 'Dandy' for many years became the branch guard, whilst his horse was transferred to carting duties in Carlisle. Interestingly it is reported that after years of walking in between railway lines, the animal would only pull carts on streets with tram lines along them, and even then it had to walk between the lines!

The bodies of the old horse-drawn 'Dandys' were given to the local bowling club and the tennis club for use as pavilions, and it was from here that the bodies were eventually taken for preservation in 1925. The replacement steam locomotives were Drummond 0-6-0Ts, later classed by the LNER as J82. The design and development of these engines owed much to Drummond's period as works manager for the LB&SCR at Brighton, and the design was deeply influenced by Stroudley's famous 'Terrier' class, though at 35½ tons the NBR engines weighed 11 tons more than the light-weight 'Terriers'.

2313 *Nettle*, one of three Sentinel Rail-cars introduced as a final attempt by the LNER to stave off bus competition in 1928. The three Sentinels allocated to Carlisle Canal were *Nettle, Thistle* and *Flower of Yarrow* and although they were mainly used on the Port Carlisle branch, they did occasionally venture on the Silloth line, out to Hawick, and even as far south as the Eden Valley line from Penrith to Appleby. Photo: Oliver Carter



Steam train services from Drumburgh Junction to the terminus took 9 minutes, and were used extensively during the summer months when the usual single coach was increased to a two or three vehicle train. Between January 1st 1917 and February 1st 1919 the service was suspended as a wartime economy measure. When the service was re-instated, it was found that buses had taken many of the passengers, and the new services were destined for trouble partly because union intransigence prevented the 'flexible rostering' required for the branch services. They insisted that two crews were required to operate the service, despite the fact that there were only six return journies per day. As there were two periods of around three hours (one mid-morning and one mid-afternoon) when the branch was trainless, the line was incapable of providing the revenue to support two crews. The service spanned a period of 11 hours, and the permitted variations to the 8 hour day could not be seen to cover this period.

Early in 1921 the service was cut to two return passenger trains and one goods working per day, making a major blunder that would ultimately lead to the line's closure. The first train ran at 11.07 am to Drumburgh, thus ending the line's hopes for any commuter traffic. The service was reviewed and reached eight trains a day, and though this number was slowly cut back again, the mistakes of 1921 were never repeated. Unfortunately it seemed that the bus had won; but as a final attempt the LNER decided to introduce a Sentinel steam railcar service, using the *Flower of Yarrow* in 1928, but it was too late and the traffic continued to dwindle. However the seaside trip trains still came and went, and in the summer of 1931 and the spring of 1932 the Sentinel had to be replaced by three coach steam trains on the morning and late afternoon runs. Even as late as Whit Monday 1932, no less than five steam specials traversed the line; but a few days later on June 1st the line closed.

The name of the waterway lived on for many years with Canal Shed at Carlisle taking its name from the former route to the Solway Firth. A trip to the beautiful but desolate Solway still holds many rewards, with the remains of the ship canal and the dock from where emigrants sailed to America still clearly visible. The Solway Viaduct which was demolished in 1935 is still easy to trace along with a modern British Railway Property Board sign warning trespassers from venturing on to the 440 yard viaduct embankment jutting out into the Solway. Elsewhere the ex-NBR/LNER railway carriage is still in use as a pavilion at the tennis club. The few remaining parts of Dandy No.2 that are to be found at Port Carlisle, remind us that had the NBR spent more on its vehicle of 1908, it might also have lasted to be preserved alongside 'No.1' in the NRM. The Silloth Branch has also vanished, but in a later article I will re-trace the route and the history of the line to nowhere: a line nobody wanted, which became the line no-one wanted to lose.

The Orphanage New Year Party, January 1943. Photo: NRM

"There's no place like home!"

HELEN ASHBY outlines the history of the London and South Western Railway's Servant's Orphanage

One of the most interesting and yet most neglected aspects of Britain's railway history is the history of the people. Without them railways could not exist; without the people requiring their service for the transport of passengers or goods there would be no *cause* for them to exist and without the engineers, the platelayers, the drivers, the ticket collectors and guards there would be no railway anyway.

The coming of the railways created incredible and enormous social changes. Railway Companies sprang up everywhere and quite soon in their wake, close knit communities of people who lived and worked on the railways began to flourish. Railwaymen formed their own social clubs and sporting associations, their own branches of the St John Ambulance Brigade and their own educational system.

What is perhaps one of the most admirable traits of the railwaymen is the way in which they have looked after their own kind in times of need, setting up widows and orphans funds to help those left in poverty or providing convalescent homes for railwaymen who have been sick. One of the most notable examples of this phenomenon is the former LSWR Servants' Orphanage.

It all started early in 1885 — there had been quite a number of fatalities on the railway and consequently a lot of children were left fatherless. The plight of these infants came to the notice of Canon Allen Edwards, Vicar of South Lambeth, who had always taken a keen interest in the local railwaymen and who had become railway chaplain to the men at the rapidly developing Nine Elms Depot. He got together a group of interested staff and suggested to them that if they all made a contribution of one penny a week from their wages towards the upkeep of a small house, then accommodation and care could be provided for these needy children.

The idea met with approval and in March 1886 the first Orphanage was opened at No.78 Jeffreys Road, Clapham, London. It provided a home for ten girls — they being the sheltered class of person at that time — the daughters of employees of the Company who had been killed in the course of their duties. The house soon proved too small to meet the demand and so the adjoining house was purchased increasing the capacity of the Home, providing accommodation, food and clothing for fifty orphan girls.

The Orphanage was a success and it was not long before the claims of several orphan boys began to be pressed on the Orphanage Committee. Soon a third house in Jeffreys Road was bought and twenty-six boys were accepted into the fold. Again numbers increased and the existing properties were quickly overburdened. By this time no further accommodation was available in Jeffreys Road so the Orphanage Committee had to look further afield. In 1900 they purchased a large house in Guildford Road, South Lambeth.

The inconvenience of running two separate establishments soon became apparent and it was agreed that bigger premises were a necessity. A short debate ensued as to where this new property should be situated — some wanted it to remain in London whilst others favoured a country location. The question of the children's health won the day for the country-lovers and, with the help of a handsome legacy bequeathed by a Mr Thomas Harvey of Clapham, a plot of land situated between the Oriental Institute and Woking Station was purchased from the London Necropolis Company for the princely sum of £2,800. That was in 1907.

In July 1909 a smart new purpose-built Orphanage was officially opened by HRH the Duchess of Albany. The Home, designed by Mr W. Trevena of Farnborough, Hants, followed three sides of a square. It was built of red brick and stone with an imposing semi-circular porch overlooking the railway line. This new building could house up to one hundred and fifty children and provided laundry rooms, kitchens and spacious playing fields for outdoor recreation. It was built on the most approved and up-to-date principles, being lit throughout by electricity.

In the mid 1930s there was another sudden increase in the number of children needing care and an extension was provided to house a further ninety. By this time the Home, known since the grouping of the railways in 1923 as the Southern Railway Servants' Orphanage, had established its own hospital — the National Health Service had not yet come into being — and minor operations

The Main Entrance to the Orphanage overlooking the railway, taken in 1988 just prior to closure of the building. Photo: NRM

Cooks at work in the vast Orphanage kitchen, 1958. Photo: NRM

such as tonsilectomies and appendectomies could be performed 'in house', as it were.

From the start the Orphanage was funded entirely from voluntary contributions. The Railway Company, quite understandably, did not want to saddle itself with vast debts for running a charitable establishment which could be of no commercial benefit.

Management and fund-raising was fulfilled by District Committees. The first to be set up was at Nine Elms, which was the main nucleus of railway workers for the area, since it boasted a large cartage depot, a vast marshalling yard and a major locomotive depot. Southampton Docks soon formed a second District Committee and it snowballed from there until there were twenty-three District Committees by the late 1930s. Recently a completely new District Committee has been formed by the employees of British Rail (Western Region) which takes the scope of the Home outside the area covered by the former Southern Railway.

Over the years various schemes were thought of for raising extra funds to support the Orphanage. Apart from the voluntary contributions there were one or two more substantial sums which came in the form of donations or bequests; then there were the usual flag days, raffles, souvenir sales and sponsored walks. But some of the ideas were far more original. A Potato Week was held at one time; people who had their own allotments donated a bag of potatoes to their local District Committee, these all went into a central pool and that fed the Home in potatoes for the best part of the winter.

One of the more novel schemes, which caught on all over the country, was the use of collecting dogs. These were well trained, gentle creatures, usually the family pet of some public-spirited railwayman. They would walk around the stations with a small collecting box strapped to their back performing quaint little tricks to entice the travelling public to drop their loose change into the box. The use of dogs for this type of activity was banned in the 1960s and working models of various descriptions in glass showcases took over — they soon broke down and were not an outstanding success.

The outstanding success of the Home manifests itself in the lives of its residents when they leave to face the world outside. Before the war the majority of the boys and some of the girls went into the railway industry. It was a logical progression — they were all children of railwaymen, brought up by railwaymen, living beside the railway.

Over the years there has been a tremendous number of children through the doors. It is a proud boast that no child has ever been turned away and even after they have left the Home for a new life the old boys and girls still keep in touch. The Annual Reunion is a major event in the Orphanage Calendar. It takes place on the third Saturday in October and generally some three hundred boys and girls come 'home' to visit. They spend the whole day there and there is a dance in the evening. It is generally a very jolly occasion where old pals meet up to catch up on the gossip or simply to sit and reminisce. One or two of the old girls shed a tear or two and some of the old boys confess to escapades in the Home that the Committee would never have condoned if it had known of them at the time — such as scaling the clock tower and other pranks. The old boys and girls have happy memories on the whole and have now formed their own District Committee to help keep the Home going for the benefit of future generations.

Since the Home was first opened.

Relaxing at home: retired railwaymen at Woking, 1st November 1959. Photo: NRM

dramatic changes have taken place in our society and similarly the need for special care has altered. As far back as the 1930s there were rumblings about the needs of retired railwaymen as well as children but it was not until the Second World War that positive action could be taken in that direction. In 1947 the Board of Management of the Southern Railway Servants' Orphanage purchased a house on the opposite side of Oriental Road and set up a home for the elderly.

In the 1970s the Hospital Unit built in 1925 was also converted into an old people's wing as the number of children needing accommodation had decreased whilst the number of retired railwaymen and women had increased significantly.

Over the past ten years in particular quite important changes have taken place. The closure of many branch lines and stations and of many major depots and works has led to a substantial decrease in the number of staff employed on the railways. The increased concern for safety on the railways has gradually led to fewer and fewer facilities and so to a reduction in the number of families orphaned by railway accidents. The availability of the Pill and other forms of contraception have done away with a lot of unwanted children and the advent of the Welfare State and the DHSS has created other provisions for childcare so that the demand for accommodation for children is very small now.

Conversely, with the improvements in the country's medical service and the better diet that is now available to the ordinary working man, the average life expectancy has increased and the number of railwaymen living on to see a long retirement has spiralled and there is now a long waiting list for entry into the homes for the elderly. In consequence, the Committee is constantly looking into ways of improving the services it can offer and expanding the type of care available in order to meet the needs of the Railway community it serves.

Now, in 1989, the Orphanage building opened in 1909 has outlived its usefulness, while the original playing field has been sold for redevelopment to raise funds to build a new Home better suited to the modern needs and to comply with the statutory DHSS standards. The old traditions will not die, however, and many original features of the old building have been carefully incorporated into the new Home. Known since May 1982 as the Woking Homes Railcare Centre, the Home now provides accommodation and care for a maximum of twelve children and for fifty-two retired employees of British Rail. The old Home has been demolished but the underlying principle is still the same. It is gone but will not be forgotten; it will linger on in many memories as a happy home, a monument to the goodwill and community spirit of Britain's railwaymen and a vital part of the history of our railways. Meanwhile the new Home soldiers on and offers of help are always welcome. They should be addressed to: The Director, Woking Homes, Oriental Road, Woking, SURREY.

YESTERDAY'S OBSERVER

DECEMBER 1947

The end of the old companies, business as usual in many areas, post-war problems still apparent elsewhere; and a rather apprehensive look at the likely new order. From the RCTS journal 'Railway Observer'

LMS

CREWE. New Class 5s 4765/6/7 have double chimneys, the last having outside Stephenson's link motion driven by double return cranks instead of the usual eccentrics. 4765/6 are equipped for Electric lighting. The Caprotti Class 5s are to have a lower footplate with splashers. They will be Nos. 4748/9 etc.

New Pacific 6256 carries the name *Sir William A. Stanier F.R.S.*

AUTOMATIC TRAIN CONTROL. The whole of the L.T.S. section from Bow to Shoeburyness is now equipped with A.T.C. apparatus, which was officially brought into use on December 1st. 183 locomotives have been fitted with the equipment which has been on trial since 1936. The system employed is electro-magnetic, with fixed inductors on the track and a magnetic receiver mounted beneath the locomotive. Passing a distant signal at "Caution" causes a warning hooter to sound in the cab and unless the driver operates the acknowledging device, the brakes are applied after 3 seconds. When signals are at "Clear" a short reassuring hoot is given in the cab.

LNER

G.N. SECTION. The onset of winter has already had its effect upon the train working on this section. Timekeeping has deteriorated rapidly in the past weeks and few trains arrive less than ten minutes late at Kings Cross. There are occasional punctual arrivals, notably the 1.15pm Cleethorpes which, by dint of a 95-minute booking non-stop from Peterborough(!) and a ten-coach load, is often in before time; even a B1 can time this train without undue effort. A contrast is provided by the erstwhile "Mark Lane Cannon Ball," now allowed no less than 143 minutes from Grantham with exactly the same stops as pre-war when it made the run in 118 minutes, and yet it contrives to lose time regularly. The running of the "Yorkshire Pullman" has been very erratic, mostly it has averaged ten minutes late, although on two occasions it has been early.

NOTTINGHAM AREA. The Banbury-York "perishables" is now normally worked by a York B16. These engines provide some fine acoustic and pyrotechnic effects, the roar of their exhaust being unmistakable. On the evening of 8/10/47, the above "perishables" was observed near Bulwell Common. The long bank was already beginning to tire the B16; on coming into view the exhaust looked very much like a colour picture of an atomic bomb explosion which appeared in one of the popular illustrated papers some time ago! There was a small dull red hot patch on the smokebox door. On being given a longer cut-off this fire-throwing monster produced a hideous racket, sparks and cinders flying to a great height, and a large portion the smokebox door glowed a bright red!

SR

ROYAL TRAIN. The Royal Train run from Waterloo to Winchester on 20th November, for the honeymoon journey of Princess Elizabeth and the Duke of Edinburgh, was composed of the Pullman cars *Rosemary* and *Rosamund* inserted in the latest three-car set 793. The engine was 857 *Lord Howe*. It had been announced that 861 *Lord Anson* was to work the train, but on the morning of the 20th it was decided to substitute 857. However, 861, complete with decorated smokebox, ran up to Waterloo during the afternoon and was placed in Platform 11 for the benefit of photographers. After the Royal couple had alighted at Winchester the train returned almost immediately to Waterloo as a private special, arriving there 7.10pm. headed by 785 *Sir Mador de la Porte*. During the passage of the special trains 779 acted as stand-by at Woking. 857 proceeded from Winchester to Eastleigh sheds and returned to London the following morning on a Union-Castle boat train.

GWR

SWINDON WORKS. The latest batch of "Halls' has been completed to 6980 (SALOP). 6977 and 6978 are allocated to Westbury and Old Oak respectively. The remainder of the engines to be built under Lot 366, 6981-90, will follow a batch of ten 0-6-0s, 3210-9 now being built under Lot 360; 3210/1 are allocated to Didcot. It has been stated that Hawthorns are to build fifty 94XX 0-6-0Ts, but it will be remembered that at one time 9400-9 were to be built by an outside firm.

WINDSOR. Despite a certain return to pre-war conditions, the late summer did not see a resumption of the school and factory excursions to Windsor G.W.R. from the North and Midlands, via Slough West Curve, which were a feature of the "Thirties". These workings brought entire trains of L.M.S. and L.N.E. stock to Windsor, together with 4-6-0s of the Wolverhampton and Worcester Divisions. Apart from incidental visits by Moguls and 0-6-0s on war-time troop-trains and specials, tender engines have appeared very infrequently since 1939, and traffic now remains in the hands of the ubiquitous 61XX, although Panniers and 14XX occasionally work in from Slough.

RAILWAY EXECUTIVE

As from 1st January, 1948, the railways will, as a provisional measure, be organised in six regions as under:-

1. The London Midland Region (the area covered by the L.M.S. in England and Wales), headquarters at Euston.
2. The Western Region (the G.W.R. area), headquarters at Paddington.
3. The Southern Region (the S.R. area), headquarters at Waterloo.
4. The Eastern Region (Southern Area L.N.E.R.), headquarters at Liverpool St.
5. The North Eastern Region (N.E. Area L.N.E.R.), headquarters at York.
6. The Scottish Region (L.M.S. & L.N.E.R. Scotland), headquarters at Glasgow.

It is intended that the new Regions shall operate as such from 1st January, especially No.6 (Scottish) and for the minor Railways and Joint lines to be attached to the appropriate Regions or London Transport Executive on this date. Railway Ships and for the time being Docks and Hotels will be controlled by the Regions under the Executive.

It is stated that the object of the re-organisation is "to create a system which will avoid the dangers of undue centralisation and provide adequate machinery for local contacts and the quick recognition of local needs". But at a recent conference the key-note appeared to be "standardisation" — especially in locomotive and rolling stock design, livery, uniform, etc., and the prospect for the enthusiast, once the initial stages are passed, is not necessarily a good one.

Book Reviews

OUR RATINGS
★★★★★ Excellent
★★★★ Very good
★★★ Good
★★ Fair
★ Poor

SEVERN AND WYE RAILWAY, VOL. 3 *(Forest of Dean), by Ian Pope and Paul Karau, Hardback, 244pp (numbered 263-580 plus intros), £16.95* **THE MILDENHALL BRANCH** *By Peter Paye, Hardback, 160pp, £15.95;* **THE TAL-Y-LLYN RAILWAY** *By J. I. C. Boyd, Hardback, 336pp (plus index), £25.00;* **ATLAS OF THE GREAT WESTERN RAILWAY 1947** *By R. A. Cooke, Hardback, 280pp, £11.95 Wild Swan Publications Ltd (all)*

The latest clutch of Wild Swan books to arrive on the BACKTRACK desk is fully up to the standard set by this very distinctive publisher and leaves us amazed that so much still remains to be said about our railway story.

Wild Swan books are usually for the specialist reader, and no doubt each of these titles will have its own little niche of followers. We find it astonishing that so much can be said about such small sections of the subject (580 pages on the Severn and Wye — and more to come!!); but we worry lest the undoubted value of these studies to the historian is overtaken by the harsh commercial realities of book production. There cannot be too many thousands waiting for Mildenhall, for example(!); but how fortunate that we still have a publisher who will take a risk and provide for these needs. Obviously, such books are not cheap in absolute terms but they are all to the high standards we have come to expect from Paul Karau's team and deserve the support of all students of the areas in question.

If we have a favourite, then it must be Boyd's Tal-y-Llyn classic, closely followed by the GWR atlas. The latter (a real 'snip' at £11.95) is a veritable mine of reference data with hardly anything overlooked, and lovingly compiled by its author. As a one-time trained cartographer I could make petty criticisms of some aspects of the map drawing, but as a historian, how I wish something similar was available for the rest of the country. Life in our offices would be far simpler too!

So an unreserved ★★★★ for all four as a group, but ★★★★★ for Boyd's minor masterpiece, a beautiful piece of work viewed from any standpoint and with superb production values to boot — far better value at £25 than many a dinner for two at the local steak house!

DESFORD LMR

Desford station, 3rd May 1963, viewed looking towards Leicester. This was an historic site having been on the 1832 Leicester & Swannington Railway, which was, in 1846, to become the oldest constituent of the Midland Railway. The old line between Desford and Leicester West Bridge closed to passenger traffic in 1928 and to freight in 1966. That portion of the line at Desford was converted to double track in 1848 in anticipation of opening of the new line from Leicester to Burton on Trent. The primitive early station was replaced by a new structure at this time, 150 yards to the west of the old site. It opened in 1848 retaining the low platform throughout its existence. The nearest portion is the Stationmaster's house with later extensions. The Leicester-Burton line opened throughout in 1849 but lost its passenger traffic in 1964. Consideration is now being given by Leicestershire C.C. to restore the passenger service between Leicester and Moira. Photos: R. C. Riley

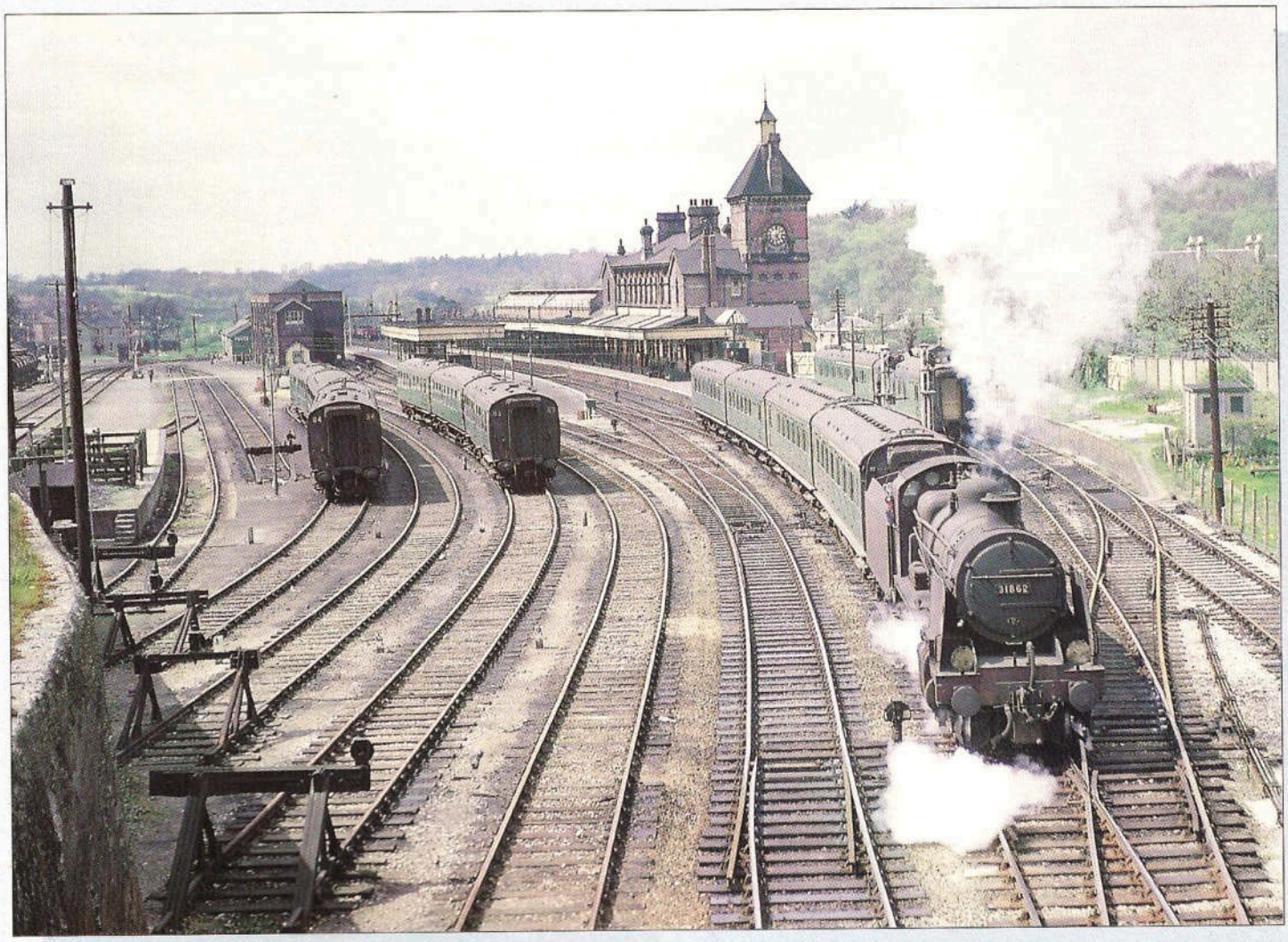
NO.2 WESTERN PRIDE

No.2 *Western Pride* **was owned by South Western Wharves Ltd, Hamworthy and is seen on the quayside overlooking Poole Harbour, 4th July 1961. It was built by Robert Stephenson and Hawthorn in 1949, Works No. 7645, with No.1** *Bonnie Prince Charlie*, **Works No. 7644. The reason for the choice of the latter name for a Dorset based engine is not known but it had better fortune than** *Western Pride*, **since it survives in the Great Western Society Collection at Didcot.**

BackTrack

FRONT COVER: This lovely view of Great Northern Railway (Ireland) Class V Compound 4-4-0 85 *Merlin* was taken outside Dundalk running shed in July 1956, the locomotive being newly ex-works. When built in 1932, it was one of five such engines to the first new compound design in the British Isles for some thirty years (save for LMS and LNER experimental engines) and showed some Midland Compound influence in its general arrangement. Photo: K.R. Pirt/K.R. Photographics

REAR COVER: Southern Class N 2-6-0 31862 departs from Tunbridge Wells West in April 1964, bound for Tonbridge with a train originating from Eastbourne via Hailsham and Eridge. The train would almost certainly then have formed a Tonbridge to Redhill working, this being the usual custom at the time, even though both routes were shown separately in the public timetable. Photo: Roy Hobbs



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